



# Mapping Youth Vulnerability



**A Knowledge, Attitude and Practice Survey among Young People in the  
Autonomous Region of Bougainville, Papua New Guinea**

## **Acknowledgements**

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Finally and most of all, we would like to thank the young people of Bougainville who participated in the survey and helped us all to learn more about how to work together to overcome the challenges posed by the HIV epidemic.

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## Glossary

<b>ABAC</b>	Autonomous Bougainville Government
<b>ABAC</b>	Autonomous Bougainville AIDS Committee
<b>A, B, C</b>	Prevention message standing for abstinence, 'be faithful', or use a condom.
<b>ABG</b>	Autonomous Bougainville Government
<b>ART</b>	Antiretroviral Therapy
<b>AIDS</b>	Acquired Immunodeficiency Disease
<b>ARB</b>	Autonomous Region of Bougainville
<b>CI</b>	Confidence Interval
<b>HIV</b>	Human Immunodeficiency Virus
<b>KTA Youth Project</b>	Komuniti Tingim AIDS Youth Project
<b>KAP</b>	Knowledge, attitude and practice survey
<b>MSM</b>	Men who have sex with men
<b>NACS</b>	National AIDS Council Secretariat
<b>NGO</b>	Non-governmental Organisations
<b>OR</b>	Odds Ratio
<b>P</b>	The probability that a given result is reached by chance factors
<b>PPTCT</b>	Prevention of parent to child transmission
<b>PLHIV</b>	Person Living with HIV
<b>PNG</b>	Papua New Guinea
<b>STI</b>	Sexually Transmitted Infection
<b>VCT</b>	Voluntary Counseling and Testing

# 1. Executive Summary

Young people in Papua New Guinea and worldwide are at heightened risk to the HIV pandemic. CARE PNG's Komuniti Tingim AIDS (KTA) Youth Project works directly with youth, and with leaders, service providers and key stakeholder partners to support improved sexual and reproductive health among the young people of the Autonomous Region of Bougainville (ARB). In mid-2010 CARE PNG's KTA Youth Project conducted a Knowledge Attitude and Practice (KAP) Survey among 556 youth from 13 communities on Buka Island and Tinputz in the north of the ARB.

The KAP Survey identified a range of HIV and AIDS related risk factors affecting young people in the ARB.

## Key findings:

- Significant levels of drug and alcohol usage were reported especially among male youth
- Most youth participating in the survey were already sexually active. Half reported their first sex by the age of 18 and a quarter by the age of 16 years
- Substantial numbers of youth reported sexual partners for paid or transactional sex
- Of those youth reporting unpaid sex partners most (80% of young males) reported more than one sex partner in the last year
- Male to male (MSM) sexual activity was reported by some youth
- High levels of forced sex (rape) was reported among young women and girls
- Overall knowledge, access and usage of male condoms was low (and much lower for female condoms).
- Familiarity to male condoms was low, especially for female youth. Youth perception of social support for condom use by peers/ leaders and adults in the community was also low, again especially as perceived by female youth
- Knowledge about HIV symptoms, prevention and transmission was weak
- Knowledge of sexually transmitted infections (STI) was weak though self-reported STI incidence was significant. Less than a third of youth reported they would seek treatment for an STI at a health clinic
- Knowledge of Prevention of Parent to Child Transmission was low
- Almost a quarter of males, though only half as many females, reported having had Voluntary Counselling and Testing
- The attitudes surveyed suggest that there are high levels of HIV related stigma among youth
- Low levels of perceived support for discussion of sexual issues in the community were reported, especially among female youth
- Analysis suggests condom usage by youth can be increased by better promotion, including demonstration, and by increasing social acceptance of condoms among leaders and adults

## **Recommendations:**

Given the findings of the KAP Survey, the following key recommendations are made. These recommendations will provide priorities to CARE PNG's KTA Project in the ARB, but are also directed more widely to leaders and stakeholder partners within the Region:

1. Build leadership at all levels to increase support for improving youth sexual and reproductive health
2. Increase access to quality sexual and reproductive health services for youth, including youth-friendly STI treatment services
3. Build on local approaches to address gender issues including particularly sexual violence
4. Improve knowledge, skills and attitudes of youth around key sexual and reproductive health issues
5. Promote greater access, acceptability and use of condoms among youth who need them
6. Develop programs to address alcohol and drugs use
7. Increase access to appropriate services for vulnerable groups including MSM
8. Work in partnership with People Living with HIV to reduce HIV related stigma and discrimination

## **2. Introduction**

Papua New Guinea has the highest prevalence of HIV and AIDS in the Pacific region, with the most recent estimates reporting a national HIV prevalence of approximately 0.9%<sup>1</sup>. These estimates also indicate that although HIV prevalence in the New Guinea Islands region – in which the Autonomous Region of Bougainville (ARB) is situated – is lower than the national average, incidence there is climbing rapidly.

Globally and in Papua New Guinea young people are disproportionately affected by the HIV pandemic. In 2008 approximately 40% of all new infections occurring in people aged 15 years and over were among youth aged 15-24<sup>2</sup>. Surveillance suggests that young Papua New Guineans are also disproportionately affected by HIV and AIDS, with 48% of known infections found among 15-29 year olds in 2009. The most common age group at the time of diagnosis for women is 20-24 (followed by 25-29 years), and 30-34 (followed by 25-29 years) for men. The group in PNG's population with the highest number of known cases of HIV is young women aged 20-24 years, and this number also appears to be rising fastest<sup>1</sup>.

This situation is made more serious in the ARB as a result of the recent decade-long conflict in the Region, which led to a loss of education, health and other key services for young people, still to be fully reestablished today.

Despite these challenges, CARE International in PNG and our partners understand that working with youth represents the solution to defeating the HIV epidemic in Bougainville and throughout PNG. By working with young people in the ARB, and also with leaders, service providers and stakeholder partners, to promote improved sexual and reproductive health among youth, CARE PNG aims to contribute to this solution.

During May – June 2010 CARE PNG conducted a Knowledge, Attitude and Practice Survey to determine and quantify HIV and AIDS related risk factors among young people in the ARB. The survey was carried out in programmatic locations in the vicinity of Buka and Tinputz in the north of the Region and included young people from 13 communities in these areas. The aims of the survey were to develop a baseline, to inform programmatic work, and to strengthen the evidence base for advocacy to improve reproductive and sexual health services for young people.

### **2.1 Komuniti Tingim AIDS Youth Project**

In May 2008 CARE International in PNG working in partnership with the Autonomous Bougainville AIDS Committee (ABAC) and other key stakeholders began implementation of programmatic work to promote HIV and AIDS prevention, care and support, and increased access to testing and treatment in the ARB through its Komuniti Tingim AIDS (KTA) Project. Throughout 2008 and 2009 KTA targeted six communities on Buka Island.

In 2010 CARE PNG shifted the focus of its KTA Project to working with youth, while incorporating important learnings from earlier work. This transition resulted from consultations with the Autonomous Bougainville Government (ABG) and other key stakeholders as well as CARE PNG's internal review processes. Since early 2010, CARE PNG's youth-focused work has identified and trained a network of youth peer educators in 13 target Buka and Tinputz communities, and through this network conducted an extensive Knowledge, Attitude and Behaviour Survey (KAP). The KAP

Survey together with the findings of a Youth Situational Analysis conducted by through the ABAC in early 2010<sup>3</sup> has provided vital baseline data, and powerful support for the youth focused approach.

The KTA Youth Project works with networks of 15 – 24 year-old out-of-school youth through a peer education approach in 13 target communities on Buka Island and Tinputz. These communities are as follows: in Buka, Ieta, Novah, Napen, Gagan, Hapan, Kahule, and Pororan Island; in Tinputz, Waraopa, Tea’o, Namatoa, Kespohit, Suangu, and Poho. The project also works with leaders and adults in the focus communities, and at both district and Regional levels towards developing an enabling environment for improved sexual and reproductive health among youth. Additionally the project works with key services providers, including health services, government, and civil society stakeholder partners with the aim of improving appropriate services and making them more youth friendly. Throughout 2011 – 2013 The KTA Youth Project will extend its coverage to reach communities in the vicinity of Arawa and Buin, further south on the main Bougainville Island.

**Goal:** The goal of the project is to reduce HIV transmission among young women and men in the Autonomous Region of Bougainville.

**Purpose and development objectives:** There are two equally important and inextricably linked purposes to this project:

1. To increase young people’s ability to play an active role in responding to youth vulnerability to HIV and STIs
2. To improve young people’s sexual and reproductive health in identified communities in ARB

The project purposes are met through four different project components:

- **Component 1, Supporting an Enabling Environment:** the objective of this component is to develop a community environment more supportive of young people’s leadership on health and HIV prevention in identified communities in ARB.
- **Component 2, Promoting Healthy Behaviours and the Use of Health Services:** the objective of this component is to promote healthy sexual behaviour among young people, and promote their use of sexual and reproductive health services in identified communities in ARB.
- **Component 3, Reducing Youth Vulnerability:** the objective of this component is to reduce young people’s structural and social vulnerability to HIV in identified communities in ARB.
- **Component 4, Building Capacity for an Effective Youth-focused Response:** the objective of this component is to build local capacity to manage and implement a sustained, effective youth-focused response to HIV.

## 2.2 Knowledge, Attitude and Practice Survey (KAP)

In mid-2010 CARE International in PNG conducted a baseline Knowledge, Attitude and Practice Survey of young people in 13 communities in the ARB.

The KAP survey utilized an assisted self-completion methodology, was conducted through youth facilitators and surveyed a total of 556 young people. The primary aim was to establish baseline data to assist the implementation of CARE PNG’s KTA Youth Project. Further aims of the survey were to

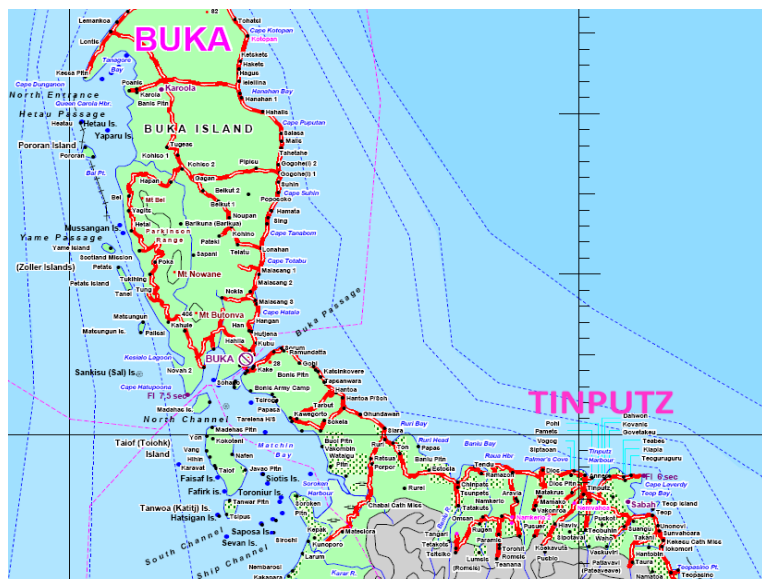


identify priorities for programmatic work with youth, and to contribute to the evidence base concerning youth sexual and reproductive health in the Autonomous Region of Bougainville, in order to increase learning and strengthen advocacy for improved services for young people in the Region.

## 2.3 Methodology

The process began with the design and planning of the survey at the start of 2010. The decision to use facilitated self-completion was taken because the approach allows efficient use of limited resources and personnel, assists participants who have low literacy levels, and enables the participant to report sensitive information anonymously.<sup>4</sup> The design required young people from the target communities to be selected and trained to participate in the planning and implementation of the survey. Calculations were performed to determine the sample size required to produce statistically significant results with greater than 95% confidence limits and above 80% power. The survey instrument was a questionnaire in Tok Pisin adapted from that developed by Save the Children's Youth Outreach Project for use among youth in the Highlands and Madang areas of PNG<sup>5</sup>. The instrument was tested and adapted to the ARB setting through facilitated group discussions, and a pilot survey among young people. A research proposal was submitted to the PNG National AIDS Council ethics committee and approval obtained.

Initially meetings were held with Counsels of Elders in each focus constituency in the Buka and Tinputz areas, and village chiefs were identified for further discussion. The aims and methodology of the survey were discussed with village chiefs and this was met with enthusiastic support. The village chiefs then discussed the survey further with their communities. Two young people from each of the 13 focus communities – one male and one female – were selected with the support of community leaders and youth. These were trained by CARE PNG in facilitating the survey and took part in pilot testing of the questionnaire. Each then returned to their communities to develop a sampling frame of all young people of eligible age. The plan was to randomly select the required numbers of participants in each location from the sampling frames.



The survey was conducted in seven communities in the Buka District and six communities in the Tinputz District of the northern part of the Autonomous Region of Bougainville.

In selecting the young survey facilitators, care was taken to minimise the social distance between them and the participants, for example in each case the facilitators were the same sex and similar ages as the participants.

Due to the complexity of gathering lists of names from the 13 communities in the time available, it proved impossible to effectively develop and use the sampling frames. As a substitute youth were asked to volunteer for the surveys in each community. This led to a total of 556 youth participating in the survey overall. This figure though substantial was less than the required 800 participants estimated from prior calculations. The impact of this deviation from the planned methodology will be discussed in the later section of this report: Weaknesses and Strengths of the Survey.

In each community, centres were identified for holding the surveys. Facilitators informed young people of the purpose of the survey, that it was voluntary, and, if they were willing to participate brought them to the survey centre on the required date. Over a two-week period, the surveys in the 13 community locations were conducted, each in a single day during which single-sex groups of up to 30 young people were gathered at the centre and surveyed together.

On each survey occasion, the purpose of the survey was explained to the group, and any questions asked were clarified. Participants were each given a pen and questionnaire for self-completion, and these were kept anonymous to support greater openness in answering sensitive questions. Participants were then asked to tick a box on the questionnaire to give their consent, or if they did not consent, to leave at that stage. The facilitator then slowly read each question giving participants time to answer. Questions were almost all multiple choice with boxes to tick so there was minimal writing needed. Each question had an opt-out 'no answer' box so that youth could ignore particularly sensitive topics if they desired. At the end of the one-and-a-half hour survey the facilitators gathered the anonymous questionnaires into a sealed envelope. Participants were finally given a lunch during which opportunity was made to answer questions and where appropriate to refer to service providers.

All papers were collected centrally, collated, coded, and codings double checked. Codes for each paper were entered into an Excel spreadsheet and double checked and cleaned. The spreadsheet was imported into Stata 11, the software used for analysis.

Basic analysis was conducted for each question according to location and sex as given below. In some cases combined variables were constructed and their distribution analysed. Basic associations were investigated. Finally a simple logistic regression was conducted to investigate the most important factors associated with 'ever having used a male condom'. The statistical tests used were the Fisher's Exact test, the Chi2 test, the t-test, analysis of variance, and logistic regression.

## 3. Results

### 3.1 Demographic Details

**Graphs 1a and 1b:** A total of 556 young people were included in the survey (an additional 52 people participated but their results were excluded because they were above 30 years). Participants were reasonably balanced in number from each location (Buka 250; Tinputz 306), amongst each of the 13 communities included in the survey, and in sex (273 females, 49.19%; and 282 males, 50.81%).

**Graph 1c and 1d:** The range of ages was 10 – 30 years with more than 80% of participants between 15 and 25 years-old. The overall mean age of participants was 22.3 years (median age 22 years). Males with a mean age of 22.6 years were slightly older than females with a mean age of 21.9 years.

**Graphs 1e and 1f:** 80% of participants overall had completed primary education. The mean number of years at school was 8.6 years (median 8 years) and there was no significant difference found between males (8.4 years) and females (8.8 years).

**Graph 1g and 1h:** Participants overwhelmingly reported living with their family (75% overall) and this did not vary significantly between locations or sex. Overall only 12.6% of youth reported that they lived with their spouse and 6.1% reported that they lived alone. 76.1% of youth reported that they were married.

**Graph 1i:** Church membership was mainly Catholic overall at 55.7% and then United Church at 31.1% and Seventh Day Adventist at 7.8%. In the communities on Buka Island the Catholic Church predominated with 94.7% of participants. In the communities around Tinputz the United Church predominated with 52.9% of participants (Catholics were only 22.7% around Tinputz).

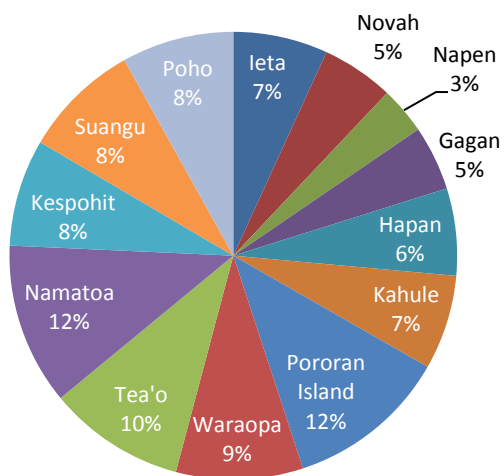
**Graph 1j:** Overall 93.8% of youth reported some income generating work. In Buka 69% reported 'market food' as their main source of income. In Tinputz 81.8% of youth reported Cocoa farming as their main source of income. 16.8% of youth reported working for a 'company' of some sort. Slightly fewer females reported no sources of income than males (8.9% females; 3.6% males).

#### Key Points: Demographic Details

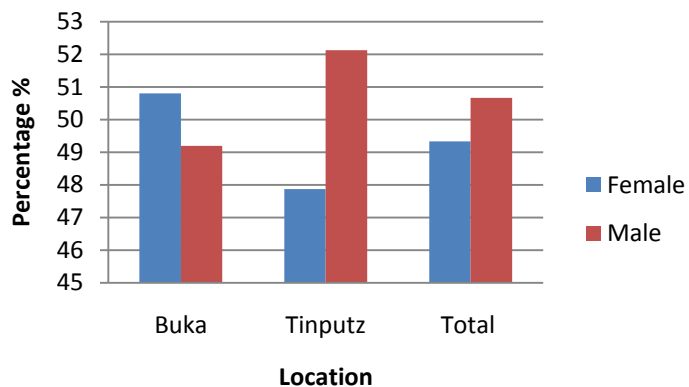
The survey included good representation of young people from target communities and almost equal numbers of males and females. The age range was 10 – 30 with a skewing towards the higher end of the range. Surprisingly most participants had completed primary education and there was no difference in education level between males and females. This may represent a bias in the sample with the better educated youth who felt more confident to answer a written survey having volunteered. The majority of young people lived with their family and almost a quarter reported that they were married. In the Buka area the Catholic Church predominates whereas around Tinputz the United Church is the dominant denomination. The vast majority of youth reported some form of income with cocoa production the most common in Tinputz and selling of market food most common in the Buka area.

### 3.1 Demographic Details

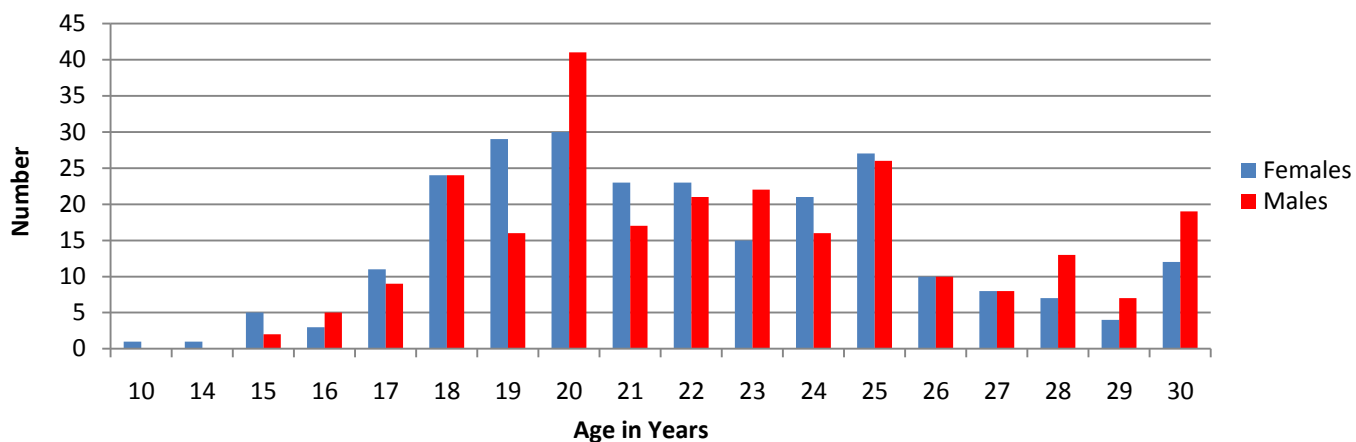
**1a Participants by Community**



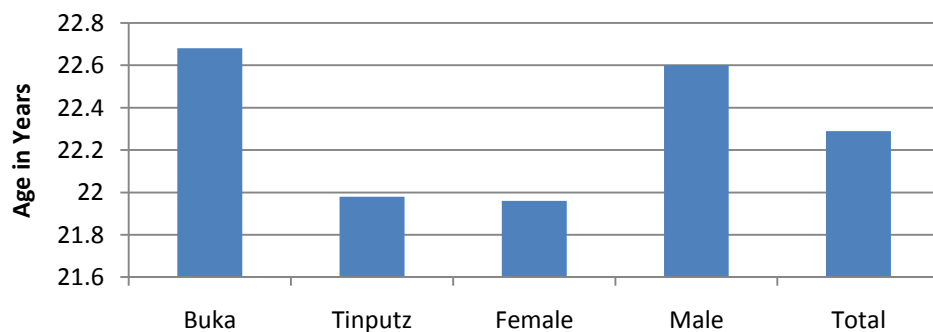
**1b Sex Distribution of Participants by Location**



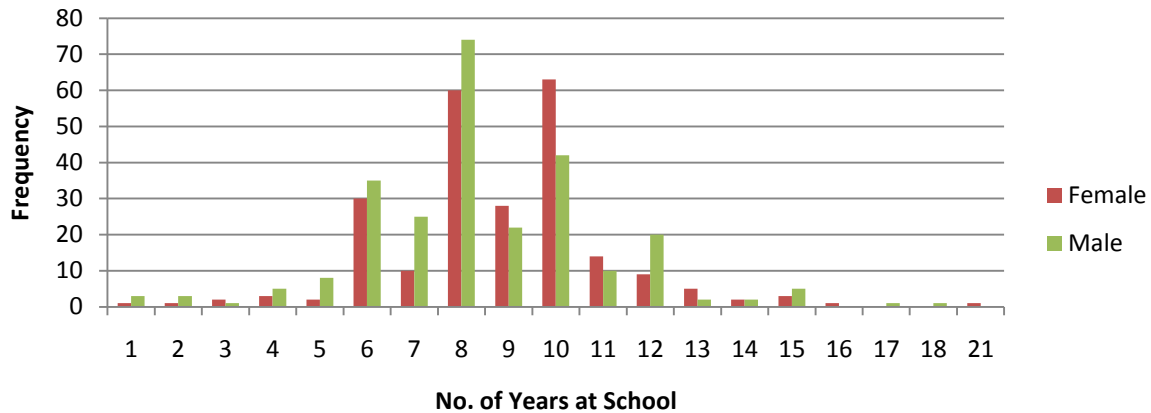
**1c Age Distribution of Participants by Sex**



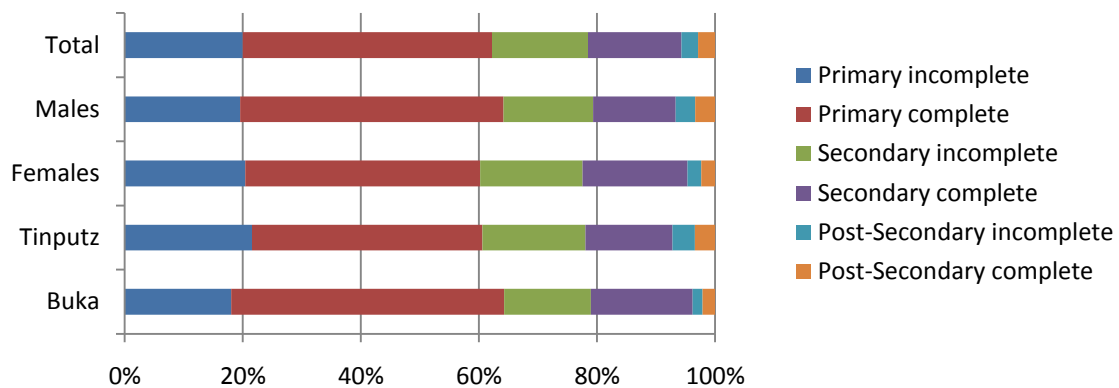
**1d Mean Age of Participants by Sex & Location**



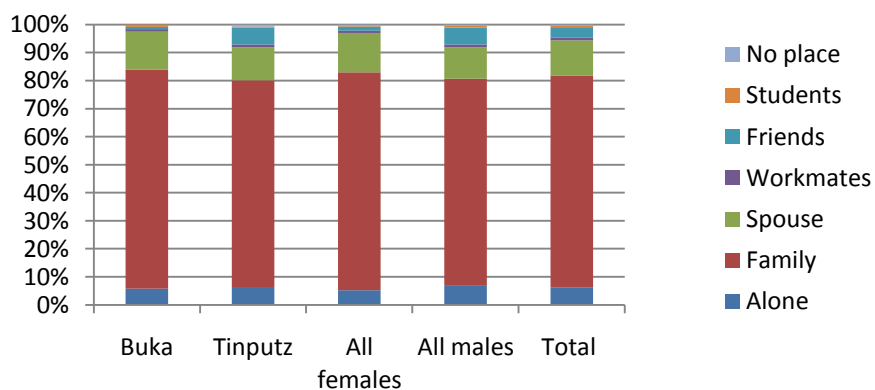
## 1e Number of Years at School by Sex



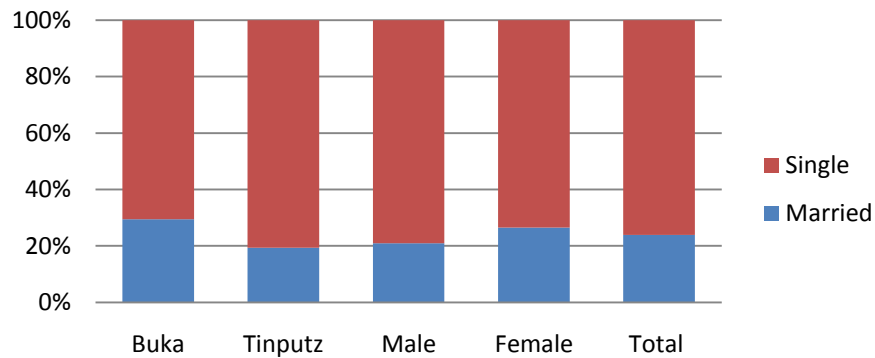
## 1f Education Levels by Location and Sex



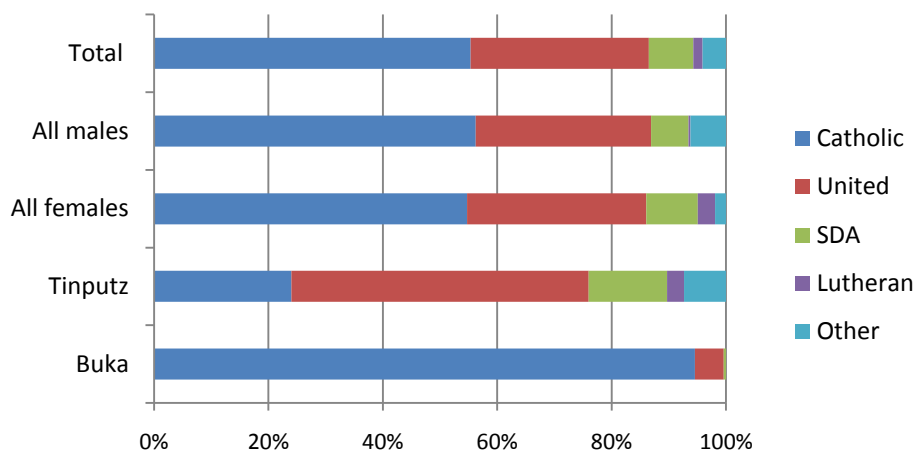
## 1g Pattern of Residence by Location and Sex



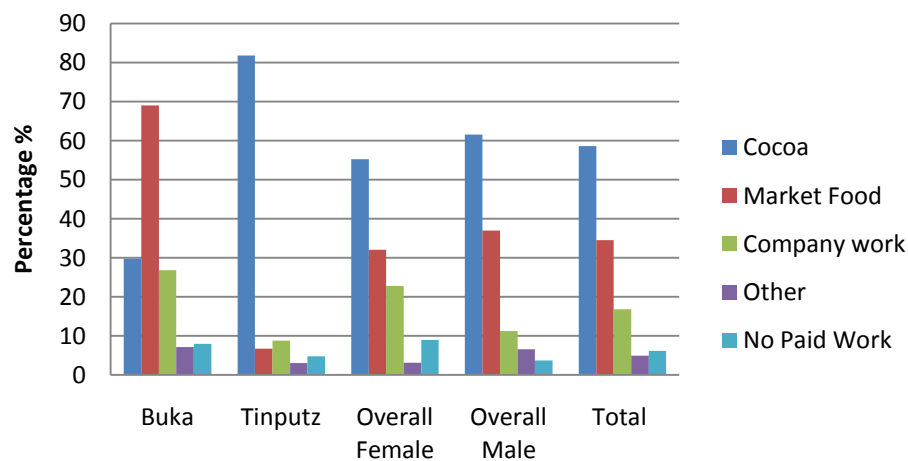
**1h Marital Status by Location and Sex**



**1i Church Membership by Location & Sex**



**1j Income Generation by Location & Sex**



## 3.2 Drug and Alcohol Use

**Graph 2a and 2b:** Overall 56% of participants reported drinking store-bought alcohol (78% males; 33% females). Overall 48% of youth reported drinking homebrewed alcohol (66% males and 28% females).

**Graph 2c:** 52.7% of youth reported drinking alcohol occasionally or more often. Among male youth this figure was 71.3%.

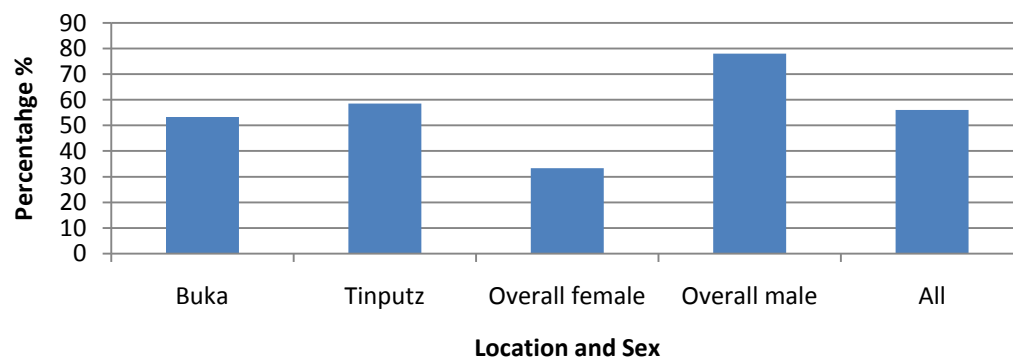
**Graph 2d:** 43% of youth reported smoking tobacco (60% males and 26% females). 24% of youth reported smoking marijuana (39% males and 8% females). 68% of youth reported using betel nut (73% females and 64% males).

### Key Points: Drug and Alcohol Use

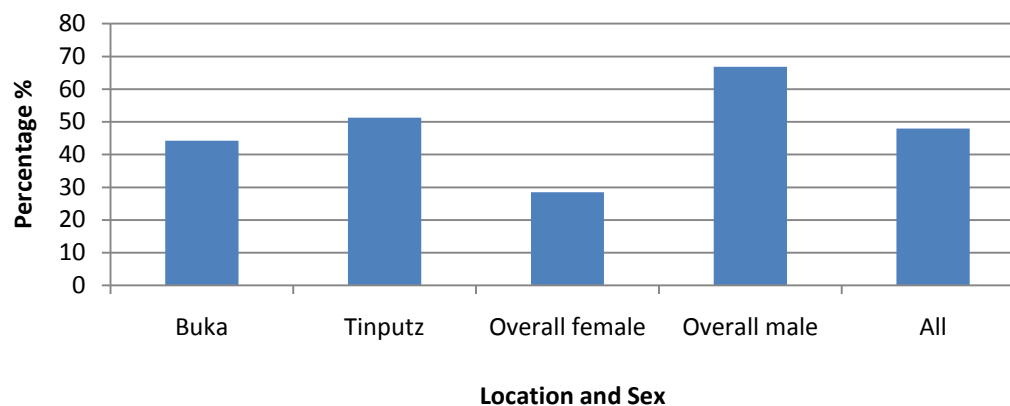
Substantial numbers of young people, especially males, reported using alcohol, including homebrewed alcohol, and other drugs, including marijuana. This finding accords with other studies of young people on Bougainville<sup>6,7</sup>. The use of alcohol and marijuana has been linked to increased sexual risk taking and crime, including sexual violence, in PNG<sup>8</sup>. As a result alcohol and drug use among young people have been identified as underlying causal factors or drivers of the HIV epidemic in PNG. This survey illustrates a clear need to work with young people to help increase understanding of the risks involved and to help them to limit and/ or manage the use of alcohol and drugs.

### 3.2 Drug and Alcohol Use

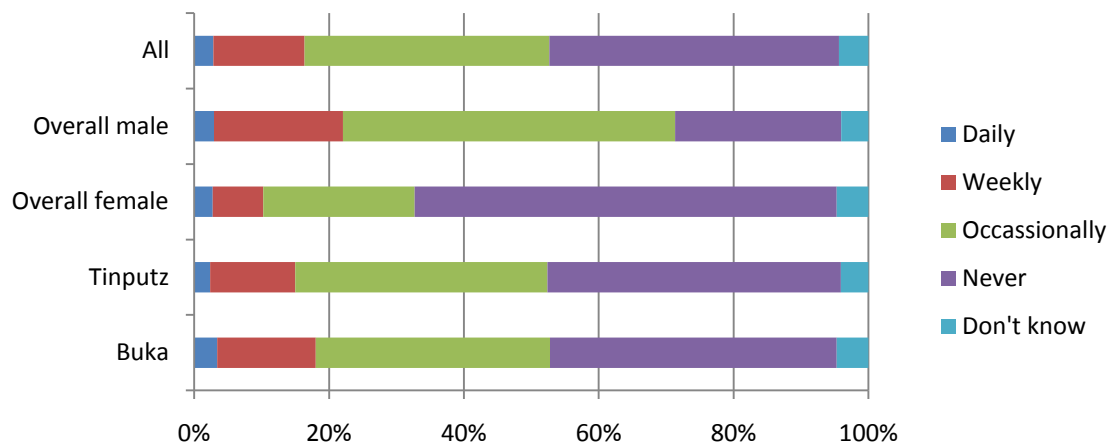
#### 2a Drinking Store-bought Alcohol



#### 2b Drinking Home-brewed Alcohol

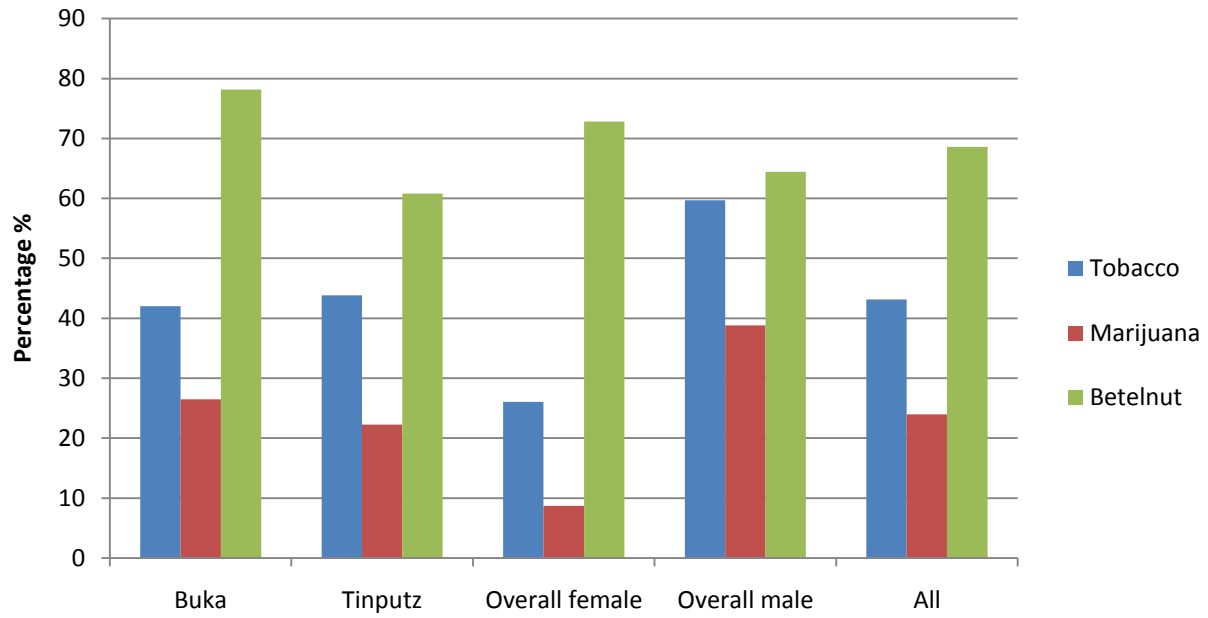


#### 2c Frequency of Alcohol Consumption





## 2d Drug Use by Young People by Location and Sex



### 3.3 Sexual History

**Graph 3a:** The majority of participants in all locations reported sexual experience (overall 75%). 64% of all females reported having had sexual intercourse whereas the proportion of males at 85% was significantly higher. 69% of youth (54.3% of females; 83.3% of males) who reported that they had experienced their first sexual intercourse also reported being unmarried.

**Graph 3b:** Overall, the reported mean age of first sexual intercourse was 18.3 years (median 18 years). The average age of first sex reported by female participants was 19 years (median 19 years), whereas the average age reported by males was significantly younger at 17.7 years (median 18 years).

**Graph 3c:** Overall the reported mean age of first sexual partner was 18.5 years. However this figure was significantly higher for females than for males in both locations. The overall mean age of first partner for females was 20.5 years, whereas for males the figure was 16.9 years. This suggests that females tend to have a first sexual partner who is older than themselves whereas males tend to have a first partner who is younger than themselves.

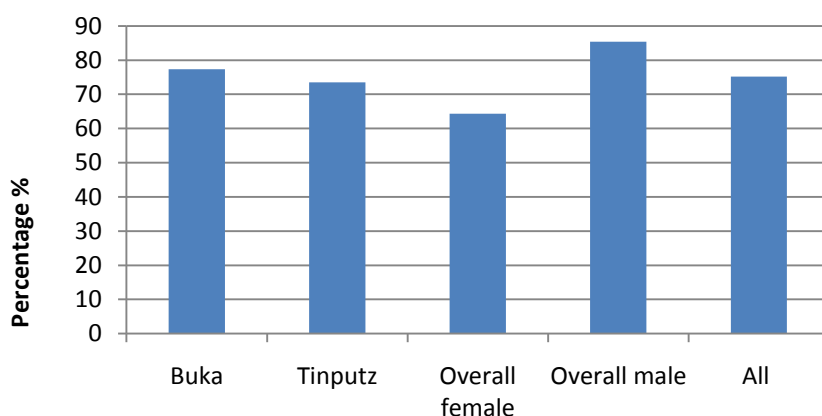
**Graph 3d:** Of those who reported sexual experience, 25% of male youth had their first sexual intercourse by the age of 16 years, and for females by 18 years; 50% of males had their first sexual intercourse by 18 years, and for females by 19 years; 75% of males had their first sexual intercourse by the age of 20 years, and for females by 21 years; and 99% of male youth had their first sexual intercourse by the age of 26 years, for females by 29 years.

#### Key Points: Sexual History

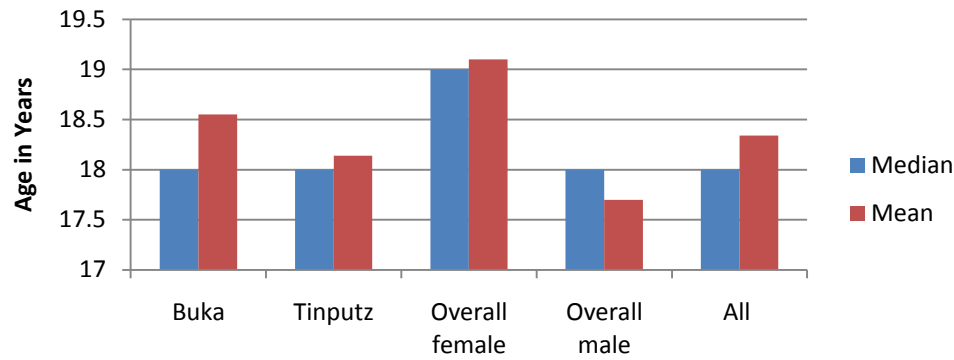
Young people both males and females aged between 15 and 24 years reported sexual activity. This includes young people who are not yet married. It is therefore essential to provide young people, males and females, of this age group with access to appropriate sexual and reproductive health education and health services.

### 3.3 Sexual History

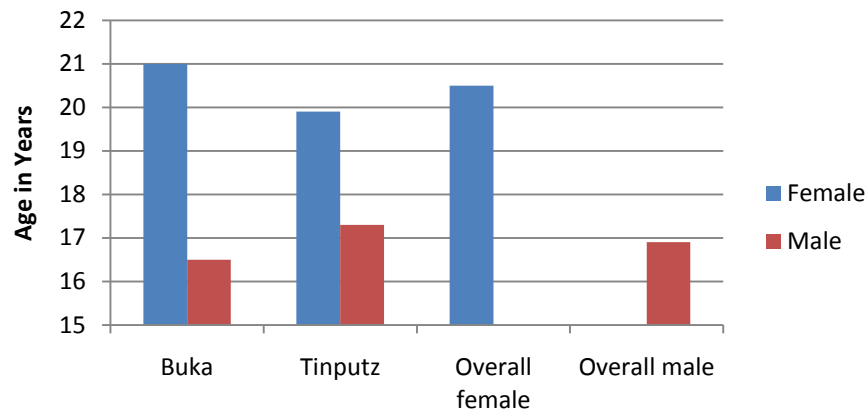
#### 3a Ever Had Sexual Intercourse



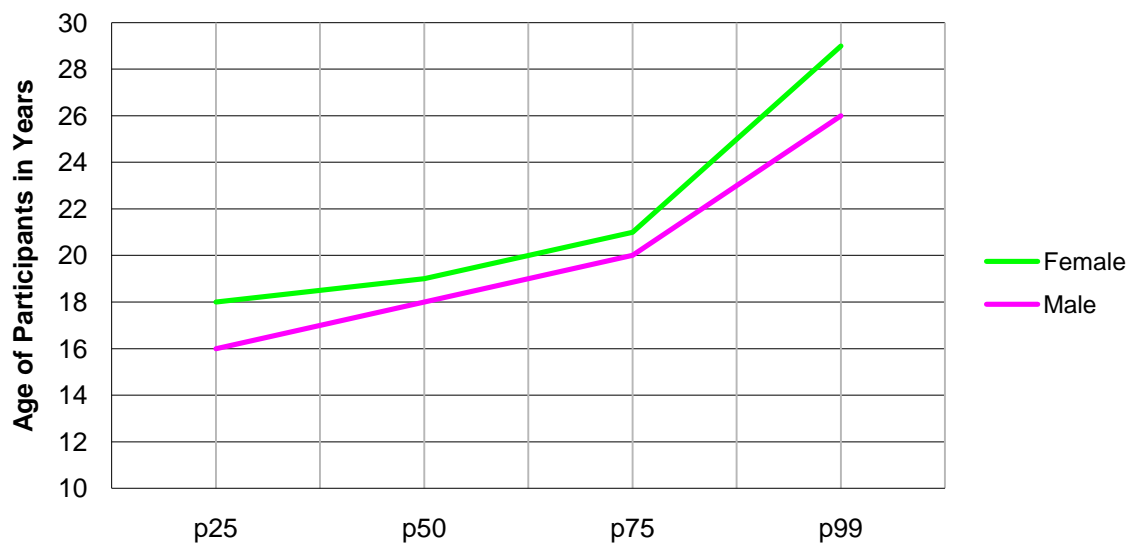
### 3b Mean and Median Age of First Sex



### 3c Mean Age of First Sex Partner



### 3d Age of First Sex by Percentile



### 3.4 Numbers of Partners

**Graph 4a:** 132 participants (24% of total participants) reported having had partners for paid or transactional sex in the last year. Amongst this group, the overall reported mean number of partners for paid sex was 3.8 (median 2), with a range of 1-50 partners for paid sex in the last year. Males reported a mean number of 3 partners and females reported a mean number of 2 partners.

**Graph 4b:** 142 participants (26% of total participants) reported unpaid sex partners in the last year. The overall reported mean number of unpaid partners was 3.4 (median 2) with a range of 1-25 partners in the last year. Amongst this group, males reported a mean of 4 unpaid partners and females reported a mean of 2 unpaid partners in the last year.

**Graph 4c:** 26 young people (or 5% of total participants) reported having had partners for paid sex in the last month. The mean number of times they had paid sex with a partner in the last month was 3.2 (median 2) with a range of 1-10. The figure for males was significantly higher (4.4) than for females (1.5).

**Graph 4d:** 156 young people (or 28% of the total) reported sex with unpaid partners in the last month. The overall reported mean number of times they had sex with an unpaid partners was 3.3 (median 2) with a range of 1-20. The reported mean figure for males (3.8) was again higher than the figure for females (2.6).

**Graph 4e:** Finally, of the 142 young people reporting unpaid sexual partnerships in the last year 60% overall reported multiple partnerships (more than 1 partner) with a range of 1-25 partners. Overall, of those who reported unpaid sex in the last year, significantly more males (81%) than females (35.8%) reported multiple relationships.

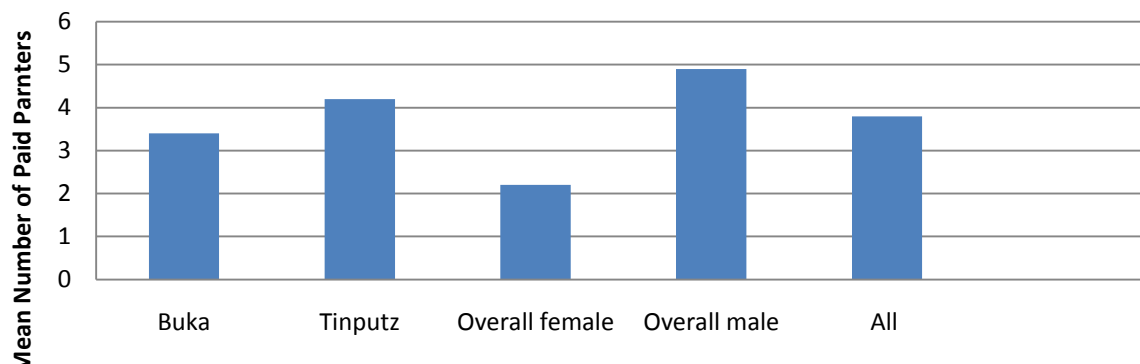
#### Key Points: Numbers of Partners

Some young people reported having paid or transactional sex in exchange for money, gifts or services. Many of these reported more than one partner for paid sex in the last year. The question did not distinguish whether the young person gave or received the payment for sex. There are complex reasons people engage in paid or transactional sex though in PNG it is often linked to income inequalities and high levels of gender inequality. People who engage in paid sex are often considered more vulnerable to HIV and STIs. As a longer term approach it is important to learn more about and to seek to address the underlying reasons that young people engage in paid sex. However, it is equally important to ensure these young people have improved understanding of the key risks involved in paid sex, and have good access to sexual and reproductive health services. This will help protect both the young people concerned and the wider community.

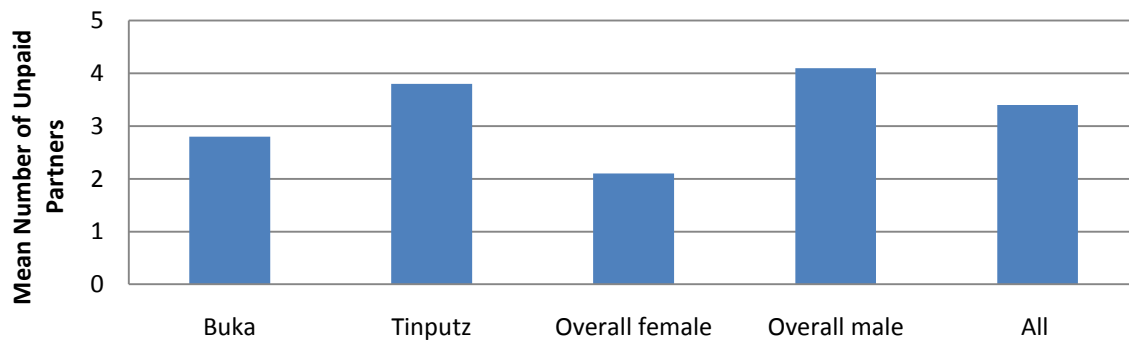
The survey also found that of those young people reporting unpaid sex in the last year, the majority – 60% overall and 81% of males – reported more than one sex partner or multiple sex partnerships. These young people are at increased exposure to STIs and HIV, especially if multiple sex partnerships are concurrent (maintaining more than one sex partnership within the same period of time). This group of young people requires good access to sexual and reproductive health services, particularly STI and HIV prevention services, such as condoms.

### 3.4 Numbers of Partners

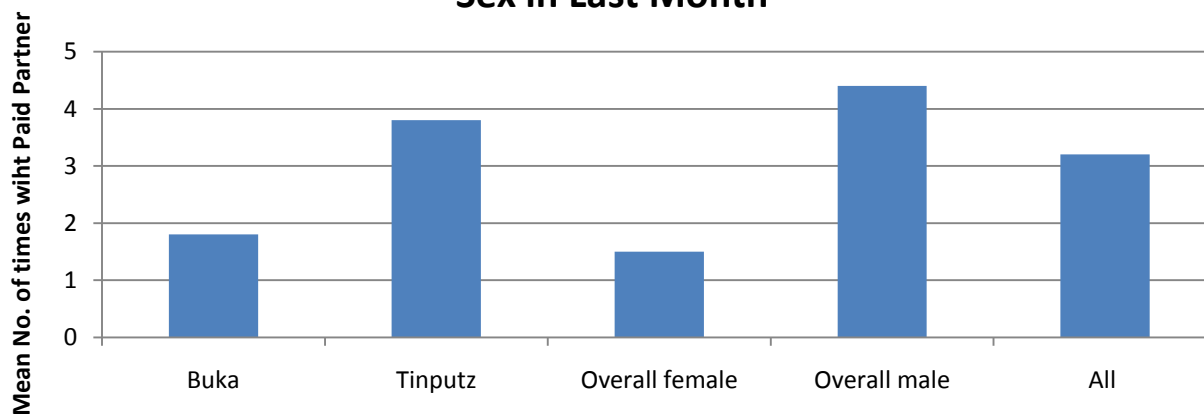
**4a Mean Number Partners for Paid Sex in Last Year**



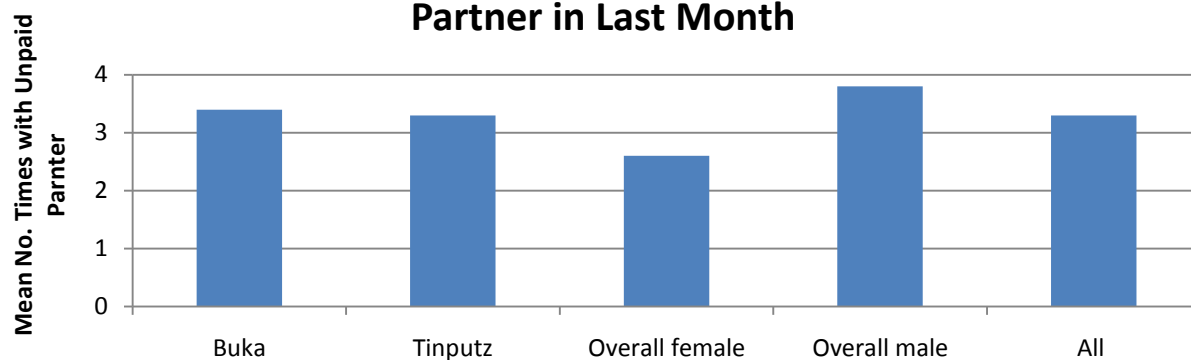
**4b Mean Number of Unpaid Sex Partners in Last Year**



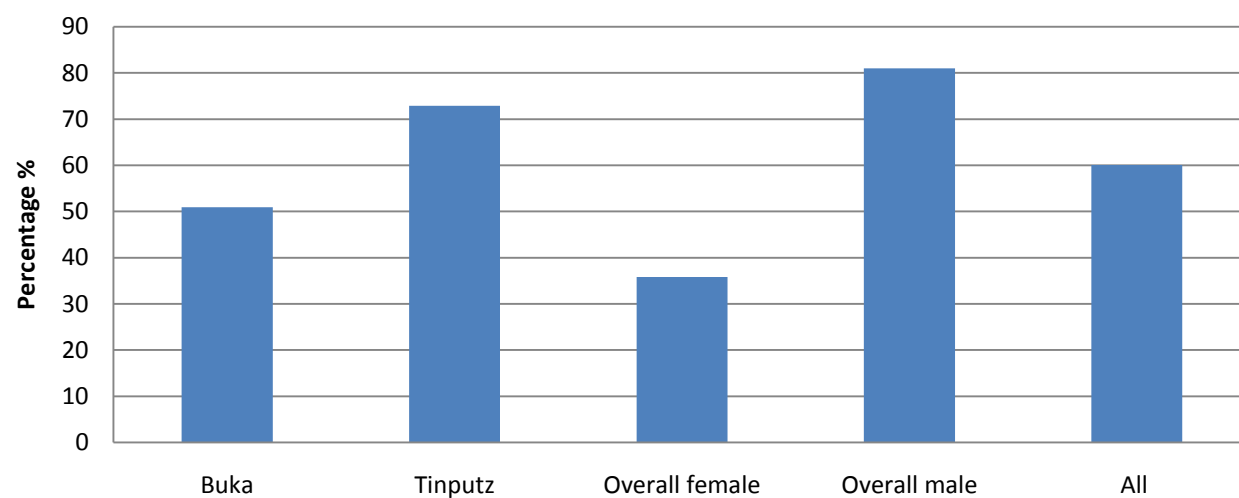
**4c Mean Number of Times had Sex with Partner for Paid Sex in Last Month**



#### 4d Mean Number of Times had Sex with Unpaid Partner in Last Month



#### 4e Reported Multiple Sexual Relationships Among Young People in the Last Year



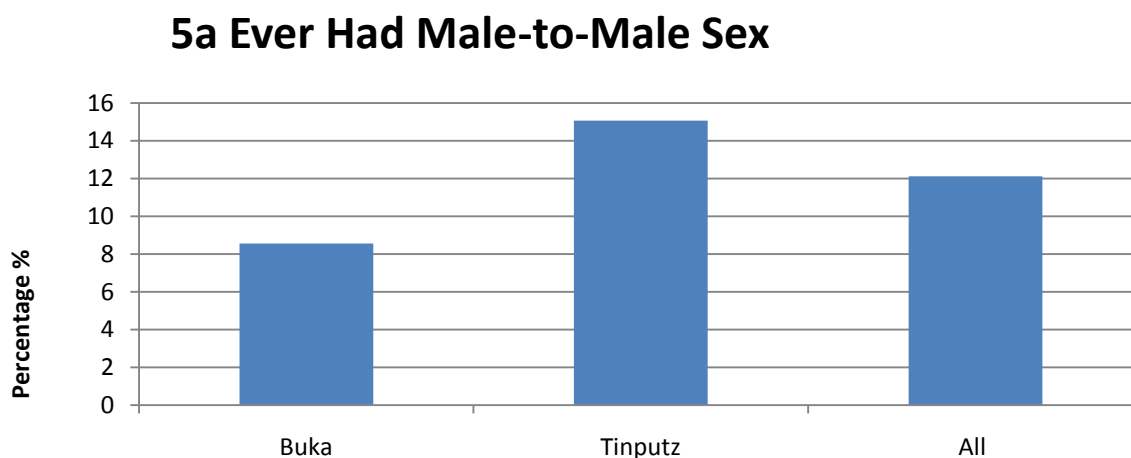
### 3.5 Males Reporting Sexual Intercourse with other Men (MSM)

**Graph 5a:** Out of 231 male participants who answered this question, 28 (12.1%) reported having had sex with another male. There was no significant difference between locations.

#### Key Points: Men who have Sex with Men (MSM)

While it is usual for a certain proportion of men to engage in sex with other men, this behavior is usually stigmatized and discriminated against in Papua New Guinea and elsewhere. For this reason these men remain hidden in society and are therefore denied access to sexual health education and HIV/ STI prevention and treatment health services. The result is that men who have sex with men are at greater risk to HIV and STIs. Since many men who have sex with men also have sexual relationships with women, their greater vulnerability to HIV and STIs also puts the wider community at greater vulnerability. It is important to work to eliminate stigma and discrimination against men who have sex with men, and to provide education and health services for this group, both from a human rights perspective and also from a public health view point.<sup>9</sup>

### 3.5 Young Men Reporting Male-to-Male Sex



### 3.6 Females Reporting Forced Sexual Intercourse

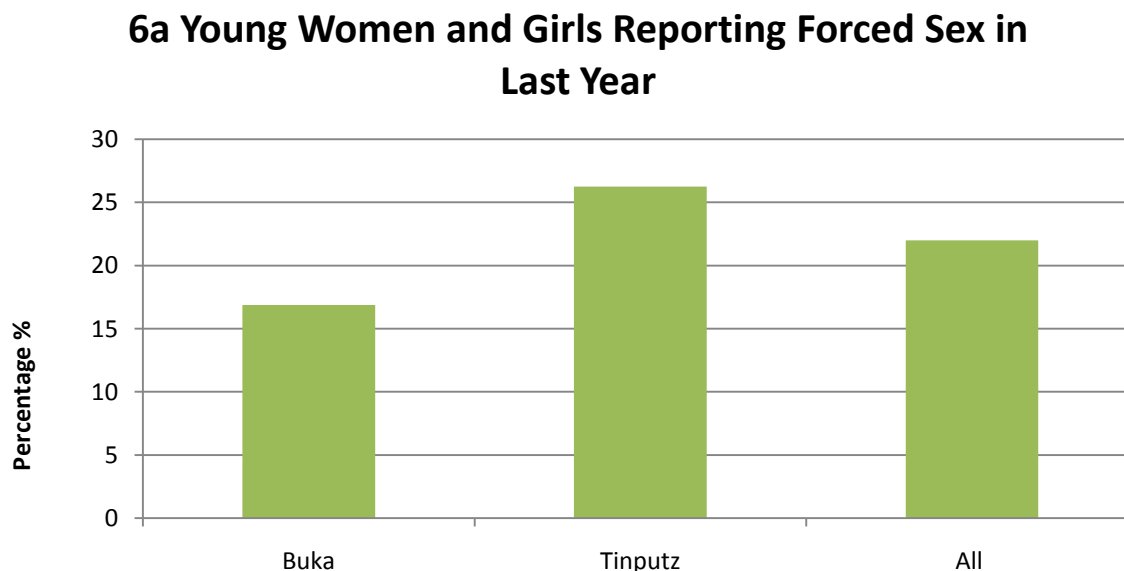
Out of 182 females responding to this question, 40 (22%) reported having been forced to have sexual intercourse in the last year. Of those women reporting forced sex in the last year 70% reported that they were unmarried and 30% reported they were married. 50% of those women who reported forced sex in the last year were between the ages of 17 and 21 years. There was no significant difference in the numbers of women reporting forced sex from the two locations covered in the survey.

Seven males also reported having been forced to have sex (though the question only asked for females to respond), three of whom also reported having had male to male sex.

#### Key Points: Females Reporting Forced Sexual Intercourse

Forced sexual intercourse or rape is a serious abuse of human rights and carries a high risk of HIV and STI transmission. It is a major concern that such high levels of forced sex were reported in the survey (for comparison a similar survey conducted among young people in the Highlands of PNG in 2007, found that 15% of young women reported forced sex in the last year). Sexual violence is considered an important underlying causal factor or driver of the HIV epidemic in PNG<sup>8</sup>. In the PNG context this is linked to high levels of gender inequality and gender-based violence. This issue requires committed leadership and serious attention and action at all levels to address the underlying and immediate causes and to provide support for the women who face sexual violence. Measures need to include work to address gender inequality and gender-based violence; increased protection for women, especially young women; and the provision of support services for those women who face such abuses.

### 3.6 Young Women Reporting Forced Sex in the Last Year





### 3.7 Condom Use

**Graph 7a:** The total proportion of youth reporting having ever used a male condom was 22% (95% CI: 18.3 – 26.1%). The proportion of females reporting ever having used male condoms was lower at 20.4% than for males at 23.6%.

**Graph 7b:** Overall 12.1% (95% CI: 9.5 – 15.3%) of young people reported that they used a condom at first sex. This was lower in Tinputz (8.6%) than in Buka (16.7%), and the difference was statistically significant. Again, the proportion of youth reporting condom use at first sex was lower for females (10.2%) than males (13.9%).

**Graph 7c and 7d:** Overall 22.1% of youth reported always or nearly always using a male condom during paid sex, whereas the figure was lower at 10.7% for unpaid sex. Males reported more often using a male condom always or nearly always both for paid sex (25.1%) and for unpaid sex (15.2%) than females did for paid sex (19.5%) or for unpaid sex (5.9%) and in both cases the difference was statistically significant, and highly so in the case of unpaid sex ( $p < 0.001$ ). In both cases there was no significant difference between locations.

**Graph 7e:** Overall the proportion of young people reporting condom use during their last paid sex (13.5%; 95% CI: 10.4 – 16.6%) was similar to that reporting condom use during last unpaid sex (13.9%; 95% CI: 10.6 – 17.1%). In both cases the figures were higher for Buka than for Tinputz though the difference was not significant. In both cases too the figure was slightly higher for males than for females and again the difference was not statistically significant.

**Graph 7f:** This graph shows the proportion of youth reporting ever having used a male condom according to sexual partners. The proportion of youth reporting ever having used a male condom over all was 22%. 28.1% of youth who reported having had first sex also reported ever having used a male condom. 29.7% of youth who reported having paid sex in the last year also reported ever having used a male condom. Finally the proportion of youth reporting ever having used a male condom among those who reported having had multiple sex partners in the last year was 35.3%.

**Graph 7g:** Familiarity with male condoms produced a mixed result. Overall 60.6% of youth reported having heard of a male condom; 56.3% reported having seen a male condom demonstration; but only 22% reported having ever used a male condom. Figures in all cases were higher for Buka than for Tinputz though only significantly different in the case of having seen a male condom demonstration. In all cases figures were statistically significantly higher for males than for females.

**Graph 7h:** Figures were lower for female condoms, with 56.1% of youth overall reporting having heard of a female condom; 37.5% having seen a female condom demonstration; and only 7.2% of youth reporting having used a female condom. Again figures were higher for Buka than for Tinputz although not significantly so. Figures were higher for males having heard and seen a female condom; but not for having used one – 9.2% of females reported having used a female condom, whereas only 5.2% of males reported having used a female condom.

**Graph 7i:** Although 58.1% of youth overall reported that they knew where to get a male condom, only 14.1% reported that they could obtain a male condom in less than one hour, and only 4.6%

reported they could obtain one from a peer educator. In all cases except being able to obtain a male condom from a peer educator, figures were significantly lower for females than for males.

**Graph 7j:** Overall 44% of youth reported that their friends support male condom use; 33.9% reported that their family support male condom use; and 41.1% of youth reported that their leaders support male condom use. When these indicators are combined, only 25.2% of youth reported that all three groups support male condom use. Figures were significantly lower for female youth than male youth in all cases. Whereas 30.6% of male youth perceived that all three groups support male condom usage, only 19% of female youth perceived that all three groups support male condom use.

**Graph 7k:** Four areas of knowledge were considered: that condoms prevent unwanted pregnancy; that condoms protect against STIs; that condoms protect against HIV; and the ability to reject the belief that condoms have holes and are ineffective. Results for youth overall were respectively: 50.3%; 36.6%; 38.8%; and 17.9%. In almost all cases figures were similar for males and females, except that significantly more males (42.3%) than females (31.8%) reported that male condoms protect against STIs.

#### **Key Points: Condom Use**

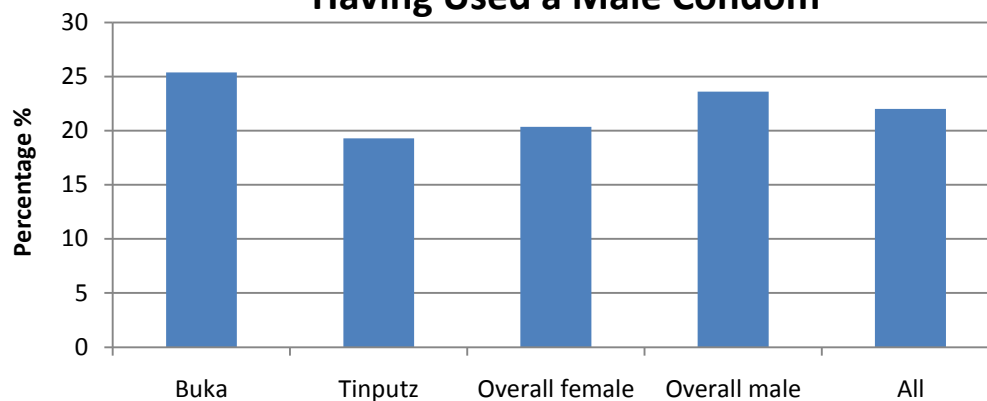
Condoms are an important means of prevention of HIV and STI transmission for sexually active people. This survey has identified groups of youth who are in need of access to condoms including those who have multiple sex partners and those who engage in paid or transactional sex. However the survey also indicates that condom use among young people in Bougainville is very low, including among those who most require access to condoms. Only 22% of youth report ever having used a male condom and only 12.1% reported using a male condom at first sex (for comparison a similar survey conducted in 2007 among youth in the Highlands of PNG found that 68.7% of youth reported ever having used a male condom, and 27% of youth reported using a condom at first sex). Among those young people who report paid sex only 13.5% report using a condom during their last paid sex (again for the Highlands the figure was 44.1%).

Overall familiarity with condoms and particularly female condoms in ARB was reported to be low, as was access to condoms. Youth reported the perception that community support for the use of condoms was also low. Interestingly the perception of support for condoms in the community was not significantly different between the Buka and Tinputz areas despite the difference in church denominations in the two areas.

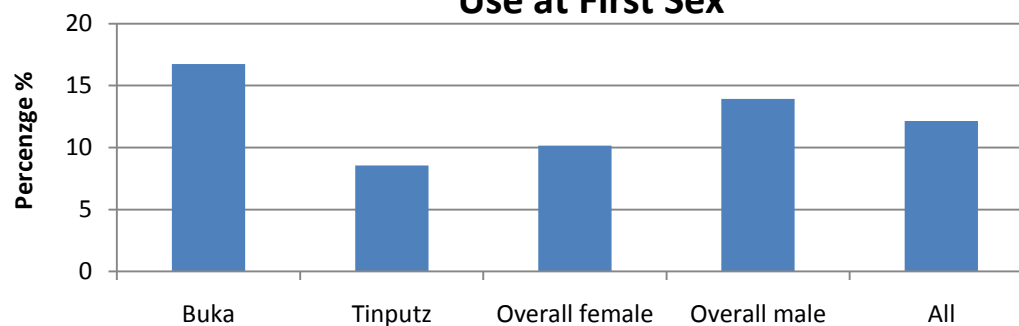
For young women familiarity with, access to, and perception of community support for male condoms were all reported as significantly lower than for young men. These factors put those young women who are sexually active at increased vulnerability to HIV and STIs.

### 3.7 Condom Use

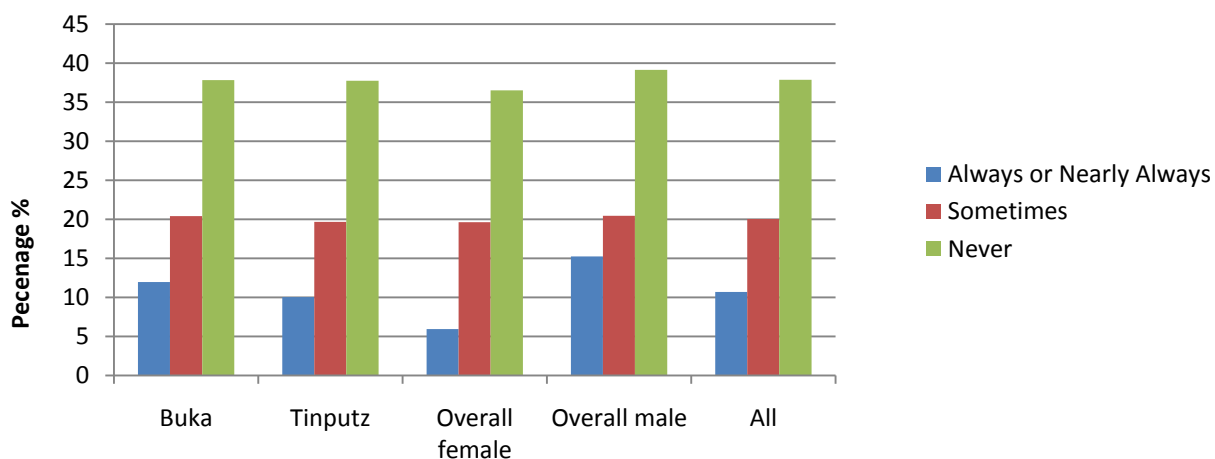
**7a Percentage of Young People Reporting Ever Having Used a Male Condom**



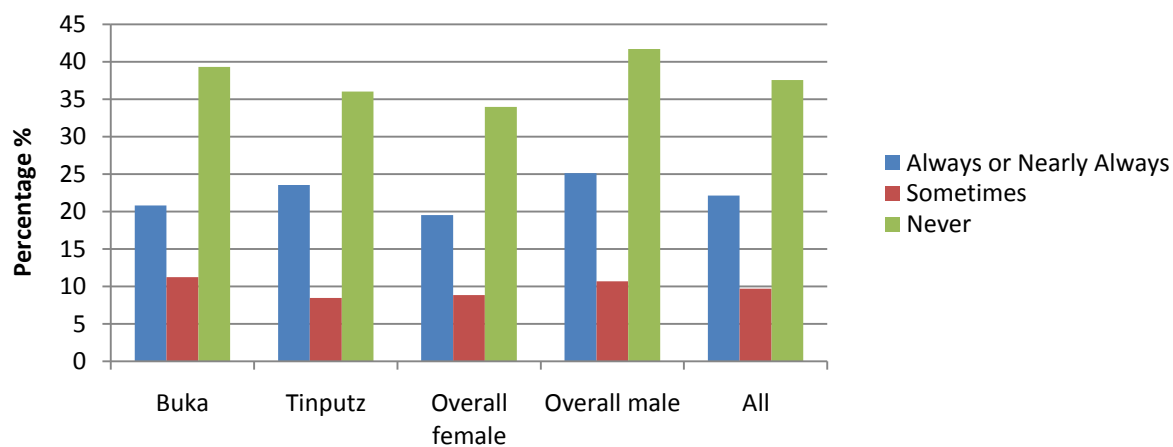
**7b Percentage of Young People Reporting Condom Use at First Sex**



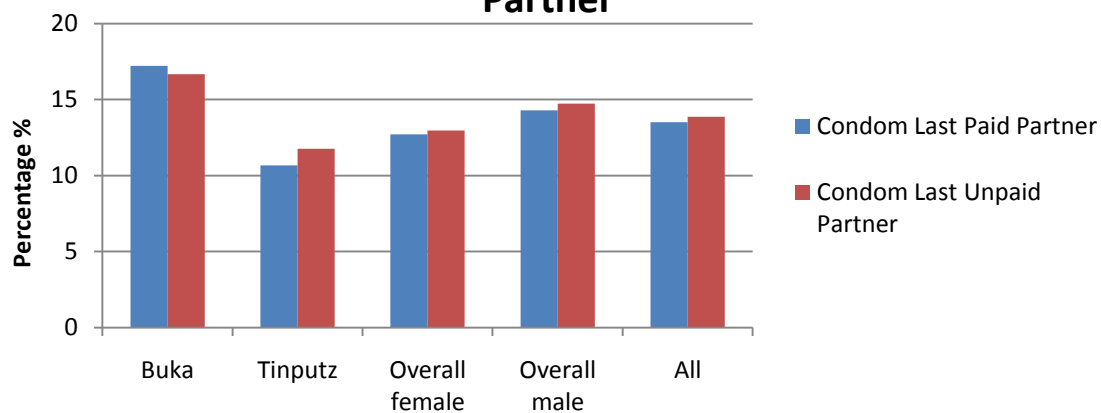
**7c Consistency of Male Condom Use During Unpaid Sex**



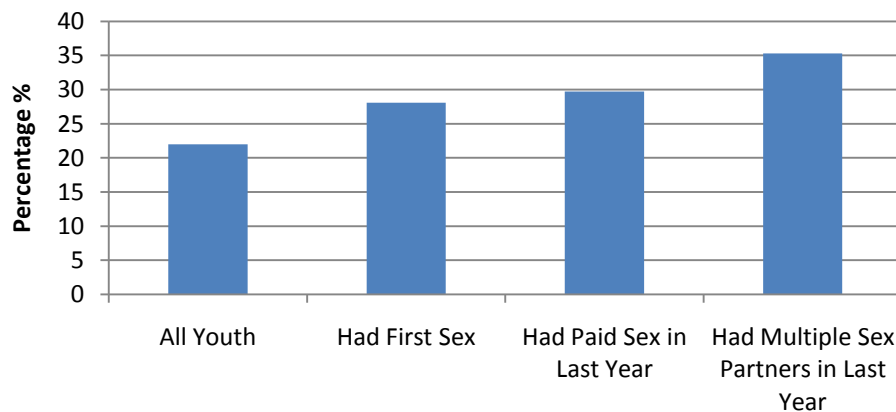
### 7d Consistency of Male Condom Use During Paid Sex



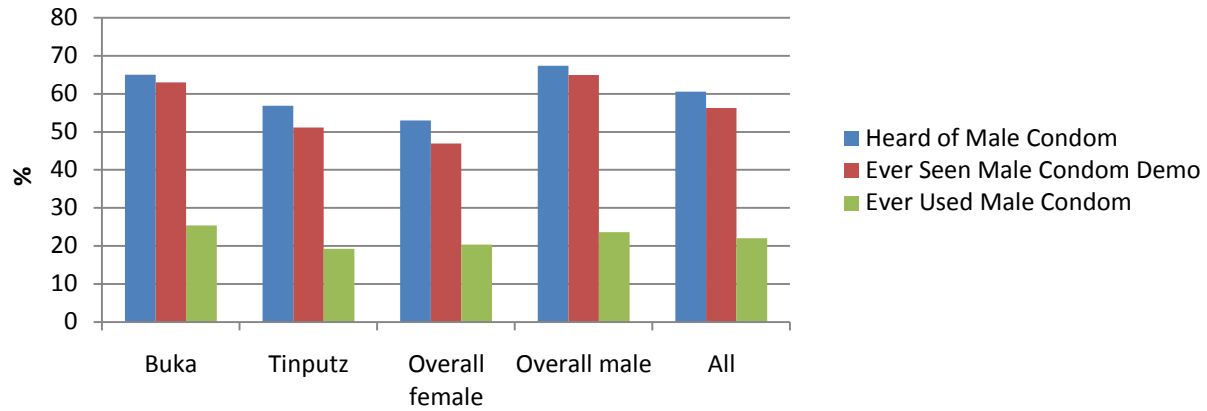
### 7e Condom Use with Last Paid and Unpaid Sex Partner



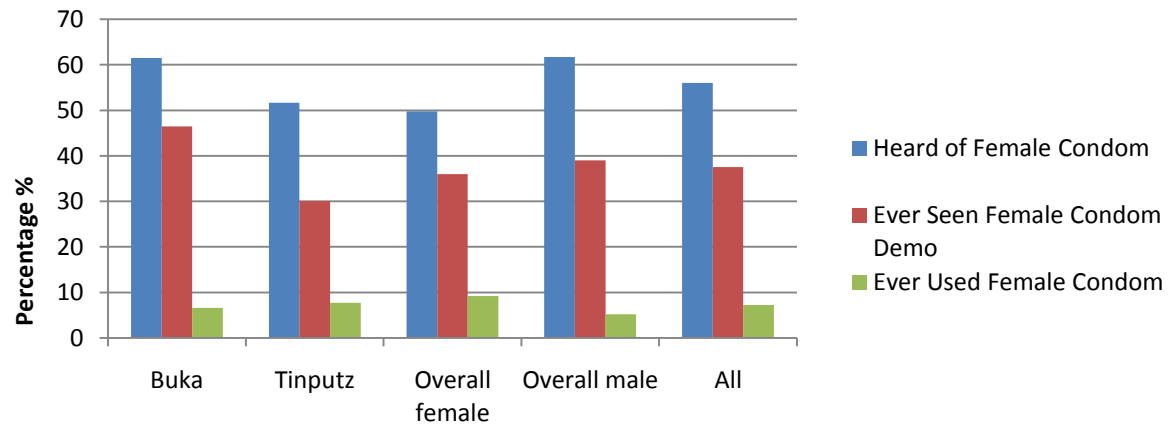
### 7f Youth Reporting Ever Having Used a Male Condom According to Sexual Partners



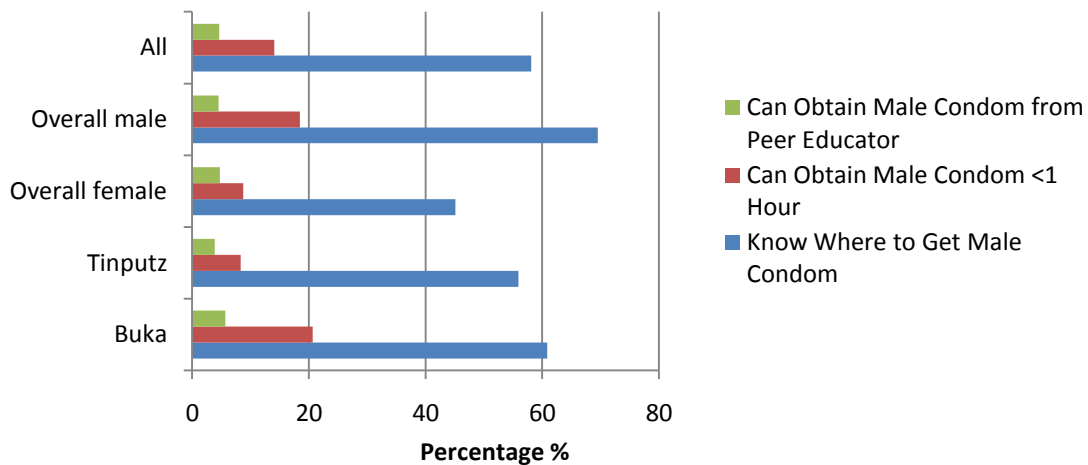
## 7g Familiarity with Male Condom



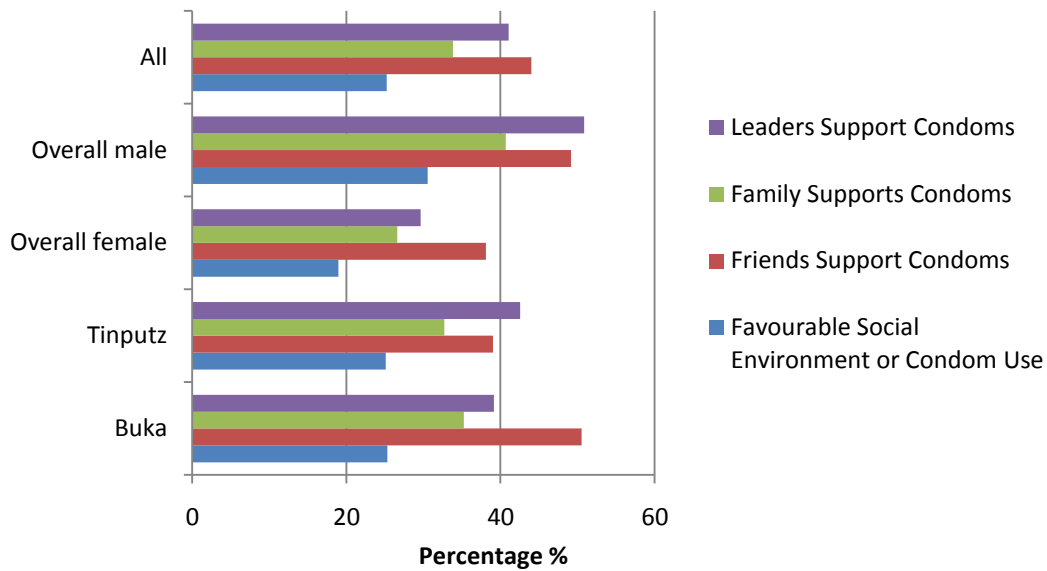
## 7h Familiarity with Female Condoms



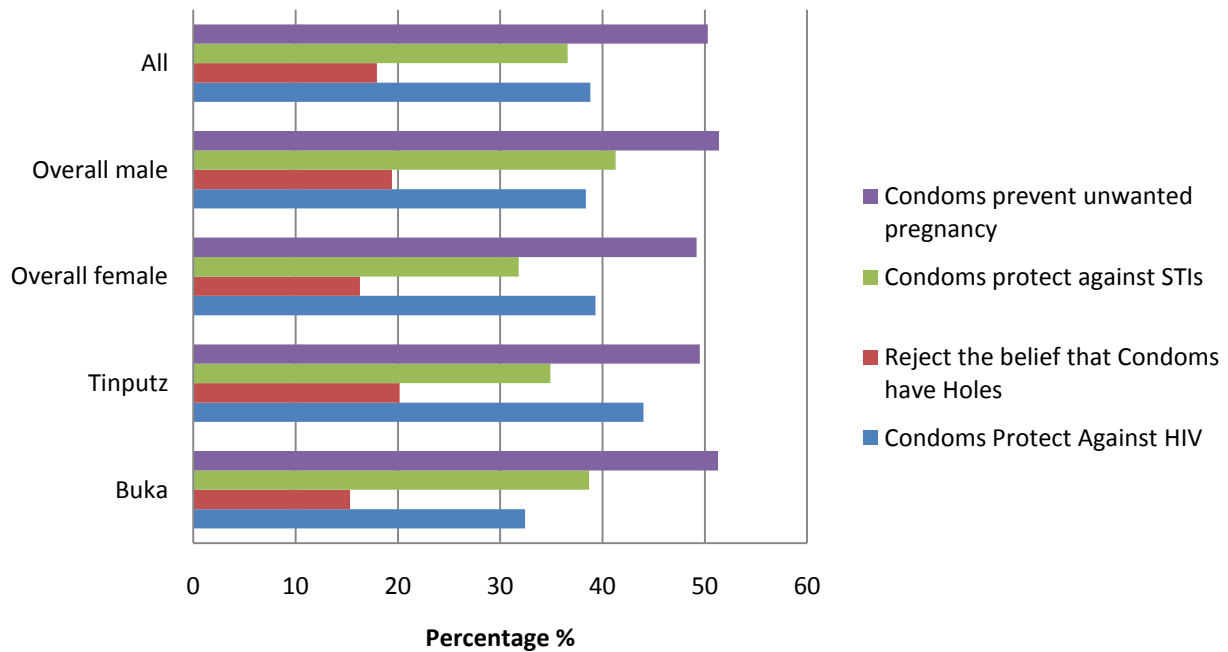
## 7i Access to Male Condoms



## 7j Favourable Social Environment for Condom Use



## 7k Knowledge of Health Benefits of Male Condoms



### 3.8 Knowledge about HIV Symptoms, Prevention and Transmission

**Graph 8a:** The proportion of youth overall who reported knowing a person living with HIV (PLHIV) was 55.2%. This figure was significantly higher for Buka (63.6%) than for Tinputz (48.3%). It did not differ significantly between males and females. Those youth reporting knowing a PLHIV in their family was lower but still unexpectedly high at 25.1%.

**Graph 8b:** Overall 65.3% of youth believed incorrectly that a PLHIV can be recognized by visual symptoms, and 20% reported that they were not sure. This meant that only 13.8% of youth understood that a person may be HIV positive but have no visual symptoms. This figure was similar in both locations and across the sexes.

**Graph 8c:** Knowledge of ways to prevent HIV transmission was low in the young people of Bougainville. Only 57.1% knew that abstinence can prevent HIV transmission; only 36.5% knew that being faithful to one partner can prevent HIV transmission; and only 38.8% knew that condoms can prevent HIV transmission. The proportion of youth overall who understood all three means of prevention (A, B & C according to the National AIDS Councils HIV prevention campaign) was only 12.1%. These figures were generally higher for Tinputz than for Buka; and did not vary significantly between male and female youth.

**Graph 8d:** Overall only 53.8% of youth were able to reject the myth that HIV is transmitted by mosquitoes; and only 50% of youth were able to reject the myth that HIV is transmitted through sorcery. However, 82.5% of youth were able to reject the myth that HIV can be transmitted through shared food. When combined, only 30.2% of young people were able to reject all three myths. Ability to reject myths did not vary significantly between locations. In general females were slightly better at rejecting these myths than males.

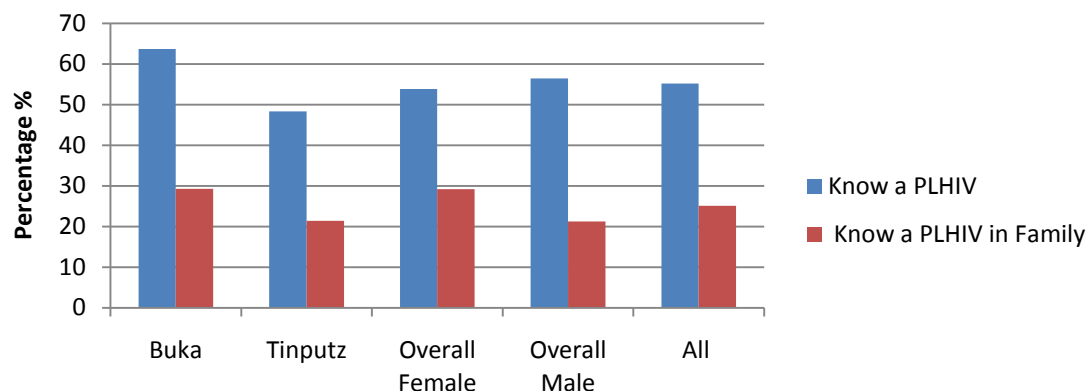
**Graph 8e:** 68.2% of youth overall knew that HIV can be transmitted through shared unclean needles. 59.4% knew that HIV can be passed through breast milk. 71.9% knew that HIV can be passed vertically from mother to child. Overall only 39.1% of youth knew all three of these methods of HIV transmission. Again knowledge was stronger among females than males.

#### Key Points: Knowledge about HIV

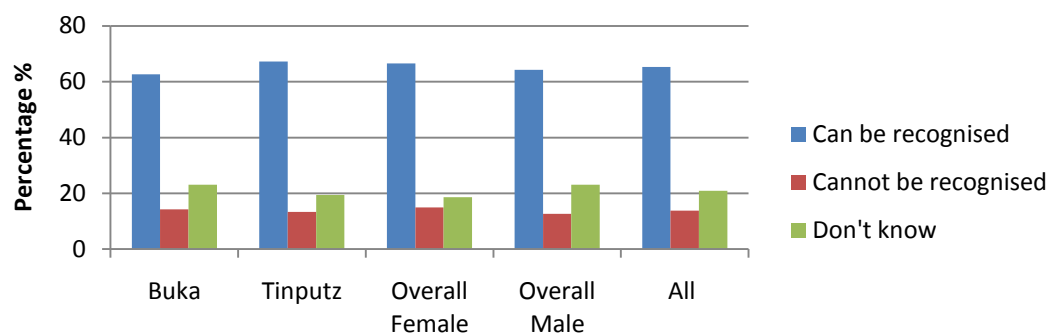
Low levels of knowledge of the basic facts about HIV and its prevention and transmission among the young people of Bougainville reflect the vulnerability of young people to the epidemic. For example, that only 13.8% of young people know that a person living with HIV may have no visual symptoms indicates that young people may be complacent about practicing safe sex with an unknown partner. These results indicate the urgent need for improved access to sexual and reproductive health education for young people in ARB.

### 3.8 Knowledge of HIV Symptoms, Transmission and Prevention

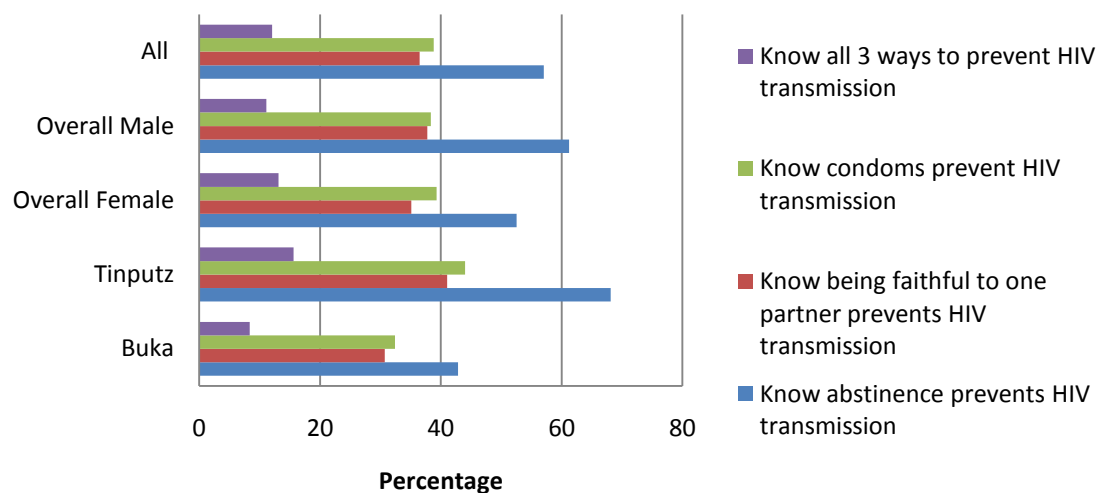
#### 8a Know a Person Living with HIV



#### 8b Know a PLHIV Cannot be Recognised by Visual Symptoms

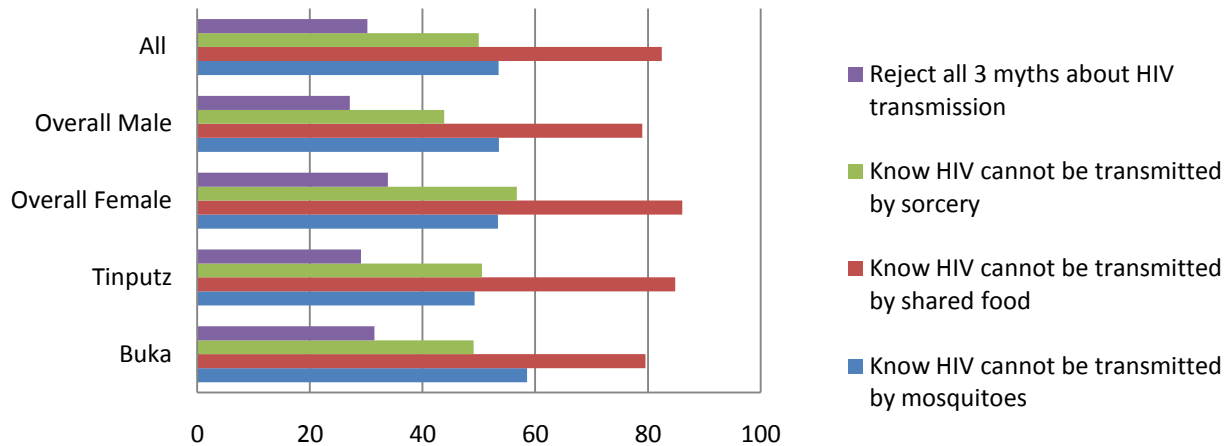


#### 8c Know 3 Ways to Prevent HIV Transmission

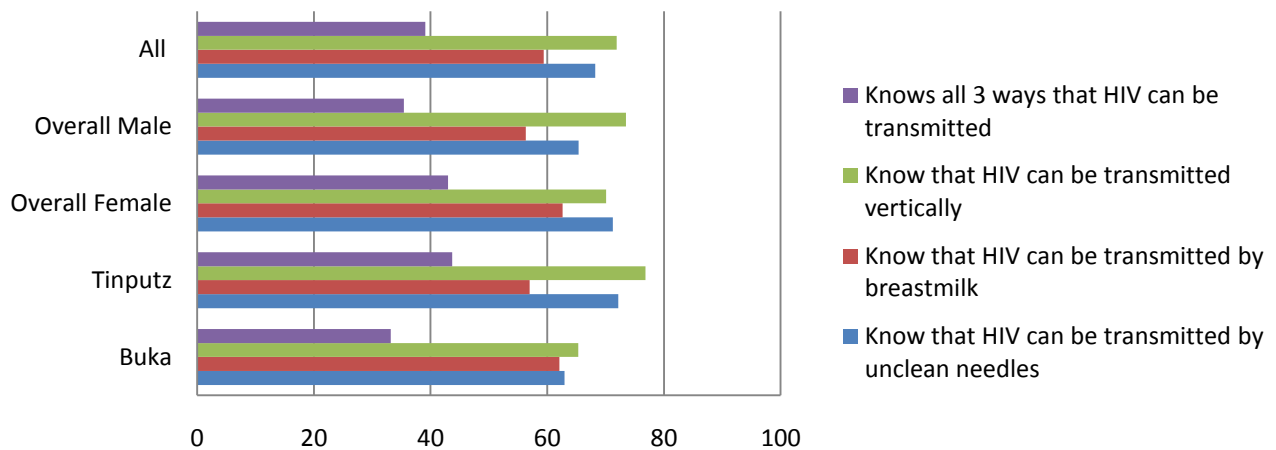




## 8d Can Reject 3 Common Myths about HIV Transmission



## 8e Know 3 Ways HIV is Transmitted



### 3.9 Knowledge of Other Sexually Transmitted Infections

**Graph 9a:** 79.3% of youth had heard of STIs and this figure was higher in males (85.7%) than females (72.6%). Only 19.6% of youth could name two or more STIs. Only 33.7% of youth knew that STIs can sometimes be asymptomatic. Knowledge of STIs was stronger in Buka than Tinputz. Knowledge was also stronger among males than females.

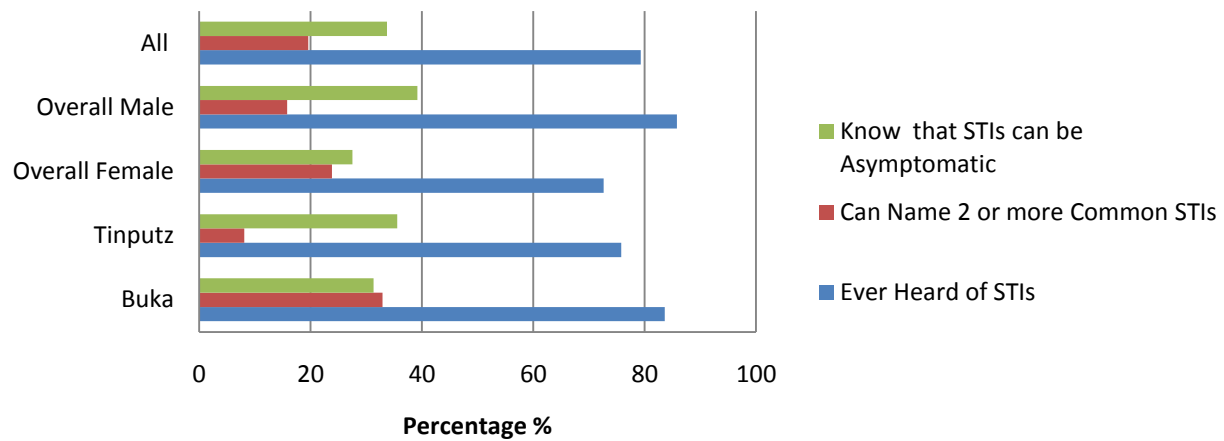
**Graph 9b:** 16.3% of youth overall reported genital discharge in the last year, and this figure was higher for males (18.1%) than for females (14.3%). 7.1% of youth reported genital sore in the last year and again this figure was higher for males (9.7%) than for female youth (4.2%). Only 31.6% of youth reported that they would seek treatment for a genital discharge or sore at a health clinic, and this figure was significantly higher for Buka (38.6%) than for Tinputz (26.3%). The figure was also significantly higher for males (36.1%) than for females (26%).

#### Key Points: Knowledge of STIs

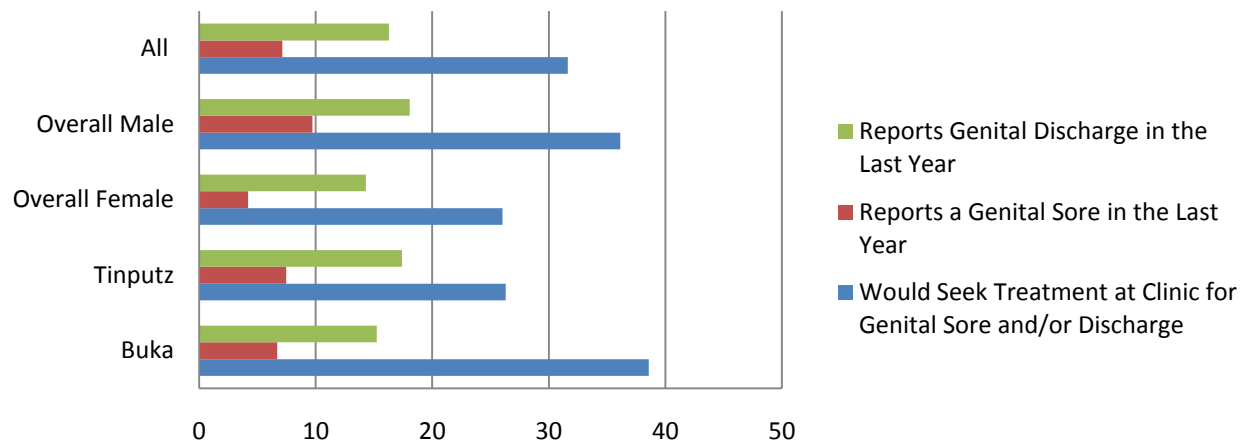
Sexually transmitted infections such as Chlamydia, Trichomoniasis, Gonorrhea, Genital Herpes, Human Papilloma Virus and Syphilis are serious causes of ill-health, death, disability, and infertility with consequent social problems, in Papua New Guinea and elsewhere. In the context of an HIV epidemic they increase both transmission and the rate of progression of HIV illness. For these reasons STIs require serious attention, both in terms of greater access to education, and greater access to prevention and treatment services. This survey clearly indicates that youth in Bougainville are vulnerable to STIs, and suggests that STIs are prevalent among young people. However, as this section illustrates, knowledge of STIs and access to appropriate treatment services are currently insufficient and urgently need to be extended and strengthened. This survey did not obtain information about why such low numbers of youth were prepared to seek treatment for STI at a health centre, but related qualitative work conducted among youth by Save the Children<sup>10</sup> has produced a range of barriers including perceptions of lack of confidentiality, fear of being labeled as sexually active, and stigmatizing attitudes among some health staff.

### 3.9 Sexually Transmitted Infections

#### 9a Knowledge of STIs



#### 9b STI Symptoms and Treatment



### 3.10 Prevention of Parent to Child Transmission, and Voluntary Counseling and Testing

**Graph 10a:** Although among youth overall knowledge of vertical transmission (71.9%) was quite high, and knowledge of HIV transmission through breast milk (59.4%) was also substantial, only 18.8% of youth reported knowledge of prevention of parent to child transmission services. These figures were similar between sexes and locations.

**Graph 10b:** In all 43.6% of youth reported that they have access to an HIV voluntary counseling and testing service, and this figure did not significantly vary between Buka and Tinputz locations. 18.2% of youth reported that they had had VCT. This figure was significantly higher for male youth (23.3%) than for female youth (12.3%).

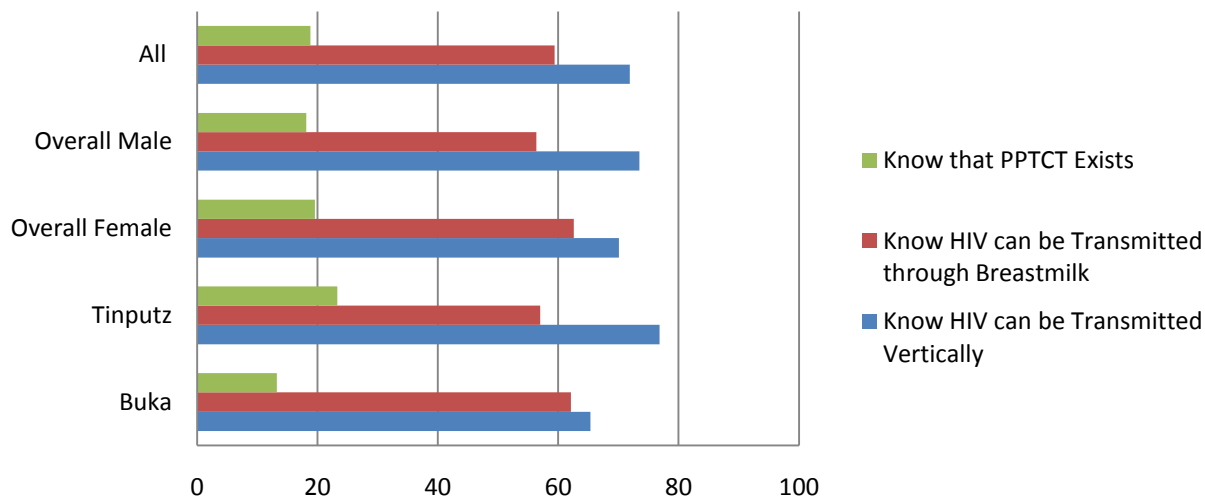
#### **Key Points: PPTCT and VCT**

The survey indicates that young people's knowledge of key sexual and reproductive health services including Prevention of Parent to Child Transmission is weak. This also reflects their lack of access to these services.

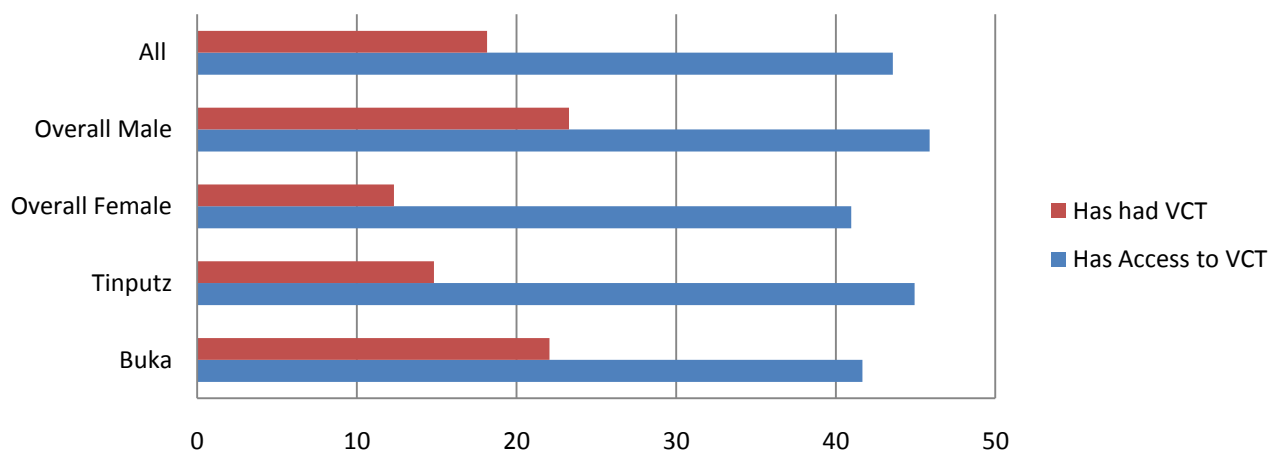
The survey also indicates that the recent increase in access to HIV Voluntary Counseling and Testing has had some success among young people with almost one quarter of young men reporting having had VCT. However, this figure is significantly lower among young women, indicating the additional barriers young women face in accessing sexual and reproductive health services.

### 3.10 Parent to Child Transmission & VCT

#### 10a Knowledge of Vertical Transmission & Prevention of Parent to Child Transmission Treatment



#### 10b Voluntary Counselling and Testing



### 3.11 Stigma and a Supportive Social Environment for Discussing Sexual Issues

**Graph 11a:** 46.3% of youth overall believed that a teacher living with HIV should be allowed to go to school to teach. 45.8% reported that they would care for a female relative living with HIV. 33.9% of youth overall reported that they would be prepared to talk to others about a family member living with HIV. When these indicators of supportive attitudes towards people living with HIV are taken together, only 10.9% of youth overall gave positive answers for all three. This indicates that levels of stigma towards PLHIV are likely to be quite high in the region. The results for these indicators suggest slightly lower levels of stigma in Buka than Tinputz though this was not significant. Results for male and females were similar though female youth reported more willingness to care for a female PLHIV in the family.

**Graph 11b:** Just less than half of youth overall (47.3%) reported that they could speak openly about sexual issues amongst their peers; while only 23.4% of youth overall reported they could speak openly about sexual issues among adults in their community. Taken together the figure for youth overall who felt they could speak with peers and adults about sexual issues was just 22.7%. These figures were higher for Buka than for Tinputz. Also the proportion of males (27.2%) who felt able to talk openly among peers and adults about sexual issues was significantly higher than the proportion of females (17.3%) who felt able to do this.

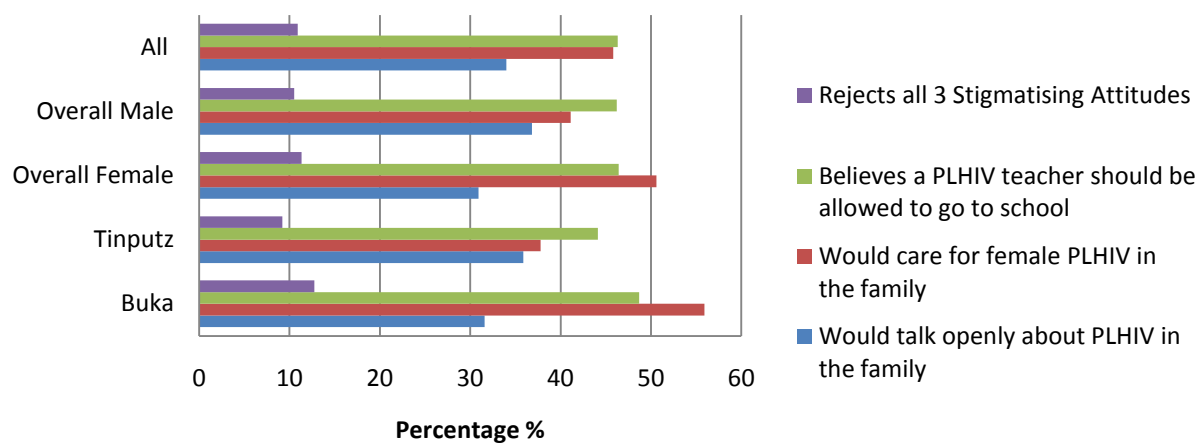
#### Key Points: Stigma and Supportive Social Environment

The inability to reject a range of stigmatizing attitudes indicates that levels of HIV related stigma among young people in ARB are high. Since stigma is linked to low levels of knowledge, this is not surprising given the lack of access young people have to sexual and reproductive health education. There is an important need to address this issue to ensure that people living with HIV are able to access treatment services openly and are able to draw on the support of their families and communities in order to benefit from treatment and remain healthy. Where stigma is higher, the impact of the HIV epidemic on individuals and communities is also much higher.

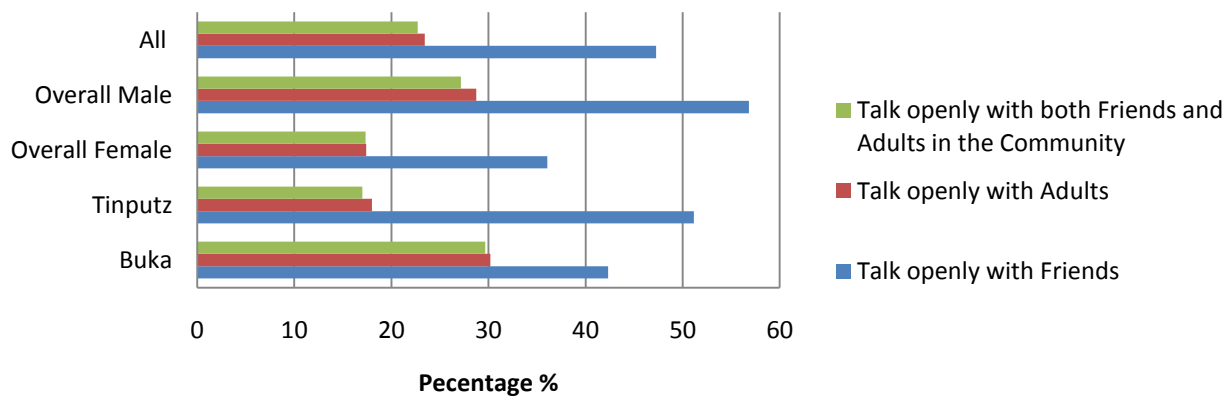
Since talking about sex is generally 'tambu' in PNG society it is not a surprise that youth perceive that there is very limited support for this in the community. However, unless communities are willing for young people to receive sexual health education in these key areas young people's particular vulnerability to the HIV epidemic cannot be addressed. It is important to work with leaders and adults in the community to help them understand the issues involved, and to develop an enabling environment for young people to be able to access sexual and reproductive health education and health services.

### 3.11 Stigma & Support

#### 11a Rejecting Stigmatising Attitudes



#### 11b Perceived Ability to Discuss Sexual Issues in the Community



### 3.12 Receiving Sexual Health Information

**Graph 12a:** This graph illustrates that significant numbers of youth (between 30 and 40% overall) are open to receiving sexual health information through peers, through drama, and through radio. These figures were comparable to numbers of youth who preferred to obtain information through health workers (29.1%) and higher than through parents (23.4%).

**Graph 12b:** This graph demonstrates that 65% of youth overall report listening to radio at least in the last month. This should be a powerful medium for reaching youth with messages about sexual health.

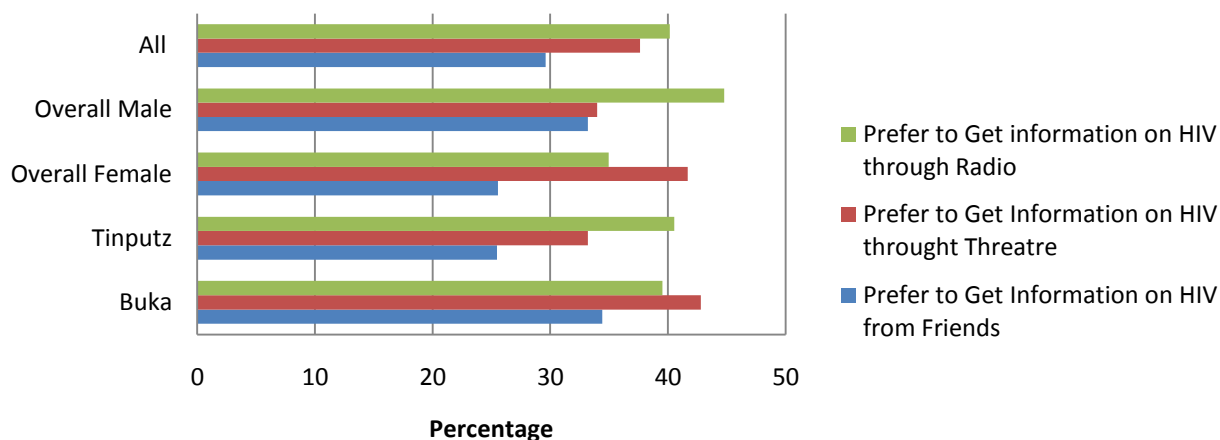
#### **Key Points: Receiving Sexual Health Information**

These graphs indicate that a substantial number of young people are open to receiving sexual and reproductive health education through their peers, or through communication media such as drama and the radio. The latter is a medium likely to reach large numbers of young people given the frequently of radio usage in ARB.

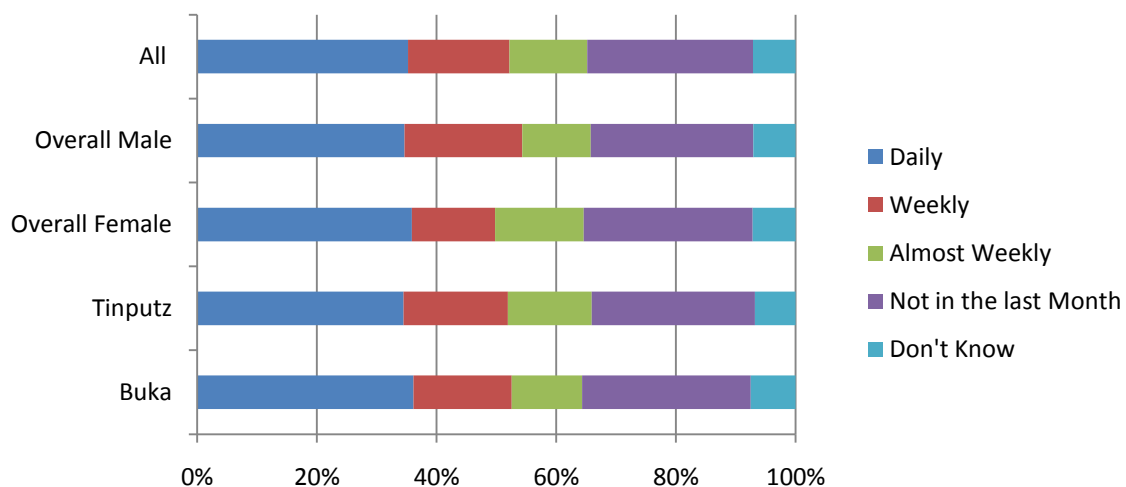


### 3.12 Receiving Information

#### 12a Ways to Obtain Sexual Health Information



#### 12b How Often Youth Listen to Radio



### 3.13 Associations and Logistic Regression

Sex (i.e. being male or female) is associated with several variables in the survey. Reported alcohol/drug use was strongly associated with sex, being significantly higher for males than females for consumption of store-bought alcohol, ( $p<0.001$ ), homemade alcohol ( $p<0.001$ ), tobacco ( $p<0.001$ ) and marijuana ( $p<0.001$ ). Reported betel nut use was higher for females ( $p<0.05$ ). Also reporting having ever had sexual intercourse ( $p<0.001$ ), and having had multiple sexual relationships in the last year ( $p<0.001$ ), were both associated with sex, again being significantly higher for males. The mean age of first sex was significantly higher for females at 19.1 years than for males at 17.7 years ( $p<0.01$ ).

The ability to reject stigmatizing attitudes was associated with knowledge of HIV prevention ( $p<0.001$ ), and ability to reject common myths ( $p<0.01$ ), which suggests improving knowledge among youth should help reduce HIV related stigma and discrimination.

#### Factors Associated with Ever Having Used a Male Condom

In order to identify factors to support increased condom use among sexually active youth, the analysis concentrated on variables associated with ever having used a male condom. In univariable analysis, ever having used a male condom was not associated with knowledge of HIV prevention ( $p=0.2$ ), knowledge of HIV transmission ( $p=0.7$ ), the ability to reject common myths about HIV transmission ( $p=0.4$ ), nor having had multiple sexual relationships in the last year ( $p=0.6$ ). However it was positively associated with the following factors:

- Knowledge that condom prevents HIV infection ( $p<0.05$ )
- Having seen a male condom demonstration ( $p<0.01$ )
- Being able to obtain a male condom in less than one hour ( $p<0.01$ )
- Knowledge of where to obtain a condom ( $p<0.01$ )
- Having Had VCT ( $p<0.01$ )
- Perception of being able to talk openly about sexual issues ( $p=0.01$ )
- Perception of Community Support for Condom Use ( $p=0.01$ )

Potential confounding variables were identified as sex, age and location. In order to estimate the strength of the association between the above variables and ever having used a male condom, all were included, together with the potential confounding variables, in a logistic regression. The results are given in table one below:

**Table one: Logistic Regression of factors associated with ever having used a male condom:**

Factor	Crude OR	P Value	95% Confidence Interval	Adjusted OR	P Value	95% Confidence Interval
Having seen a condom demonstration	5.0	p < 0.01	2.9 – 8.7	4.2	p<0.01	1.5 – 11.8
Knowledge of where to obtain a condom	5.4	p < 0.01	3.0 – 9.9	2.0	p=0.2	0.7 – 5.6
Perception of Community Support for Condom Use	3.0	p < 0.01	1.7 – 5.3	2.2	p<0.05	1 – 4.7
Had VCT	2.2	p < 0.01	1.3 – 3.9	1.5	p=0.3	0.7 – 3.5
Perception of being able to talk openly about sexual issues	2.7	p < 0.01	1.6 – 4.7	1.3	p=0.6	0.6 – 2.9
Knowledge that condom prevents HIV infection	1.8	p < 0.05	1.1 – 2.8	1.1	p=0.8	0.5 – 2.4
Can get a condom in < 1 hour	2.6	p < 0.01	1.3 – 5.0	1.6	p=0.4	0.6 – 4.1

As table one shows, having seen a male condom demonstration has an adjusted odds ratio of 4.2 (95% CI: 1.5 – 11.8) with a p-value of less than 0.01. This indicates that after controlling for the effects of other associated variables and potential confounding variables, those youth who reported having seen a male condom demonstration were 4.2 times more likely to have reported ever having used a male condom than those youth who did not. Also reporting community support for condom use (support from peers, adults and leaders for condom use) has an adjusted odds ratio of 2.2 (95% CI: 1.01 – 4.7) with a p value of less than 0.05. This indicates that again after controlling for the effects of other variables and potential confounding variables, those youths who reported community support for condom use, were more than twice as likely to have reported ever having used a male condom than those youth who did not. Other factors were no longer significantly associated with ever having used a male condom after controlling for potential confounders. Note, this does not indicate that they are unimportant but that this survey has not identified them as the most significant factors.

These findings together suggest that those youth in Bougainville who report that they have seen how to use a male condom and who perceive that there is community support for condom use are more likely to have used a male condom.

#### **Key Points: Associations and Logistic Regression**

Analysis of the survey indicates that risk factors affect males and females differently. Findings also suggest that in order to achieve greater use of condoms by those who need them, condoms should be socialized more widely, and demonstrations provided. Further, that the views of leaders and adults in the community play a key role in influencing accessibility of condoms for youth. Working with leaders to increase acceptance and support for condoms as a means of HIV and STI prevention should increase access to condoms for those youth who need them.

## 4. Weaknesses and Strengths of the Survey

The survey design required a sample of 800 young people to be randomly selected from the 13 target communities. To achieve this, two youth facilitators were recruited in each community and tasked with building sampling lists of all resident youth matching the criteria for the survey. Approximately 62 individuals were to be selected by simple random selection from each sampling frame. In the event it proved too complex to complete this process within the time required. As an alternative the youth facilitators supported by local leaders mobilised youth in their communities to voluntarily participate in the survey. This resulted in a lower number of participants than planned (608 participants completed the survey). Also, since the participants were effectively self-selecting the sample was not random.

This process produced some sampling bias which needs to be accounted for in interpreting the results. Firstly, the sample was skewed towards older participants, with some up to the age of 45 years. To counter this, the papers of all those older than 30 years were excluded from the analysis, which brought the final sample size down to 556 participants. Secondly, there is some evidence from the analysis that the majority of youth were reasonably well educated, with 80% overall having completed primary school and no difference found between males and females. This was possibly due to only those youth who felt more confident to complete a written survey volunteering to do so. Despite this the education levels of participants did vary quite widely from those not having completed primary (20% of the sample overall) to those who had completed tertiary education (2.8% of the sample overall). More importantly the diversity of answers given by participants strongly indicates a broad spectrum of youth representation, including a number of subgroups. Added to this some communities produced an impressive turnout (2 villages had more than 60 participants) giving a good number of participants overall. These factors suggest that despite the sampling weaknesses the survey was reasonably successful in mapping key HIV and AIDS related risk factors among the youth of ARB.

Despite the range of mechanisms built in to the survey design to encourage truthful answering of sensitive questions, it is likely that the survey was affected by some answering bias. Dominant social norms generally influence how individuals present themselves and it is usual in such surveys for young men and women to under report activities that conflict with social norms, age or gender expectations, and to over report behaviours that reinforce these factors. Despite this the answering of particularly sensitive questions such as those concerning men who have sex with men, or forced sex (rape), indicate that the approach taken was successful in supporting participants to give truthful answers.

Another weakness of the survey was that the survey instrument neglected to ask specific questions about young people's knowledge and access to Antiretroviral Treatment. This service is expanding in PNG and it is important that youth are aware of it and have access. It would also be desirable to determine whether those youth who reported paid or transactional sex had paid for sex or received payment for sex, and whether this varied with gender. For future surveys CARE PNG will ensure appropriate questions are included to determine these issues.

Finally, in some villages infrastructure was sparse and it was not possible to find a suitably large building to house the survey, leading in some cases to the survey needing to be held out-doors. In such situations youth facilitators and participants showed admirable initiative in finding private locations where youth could answer the questionnaires without fear of being overlooked. In at least

one case this involved male youth sitting in adjoining trees while the facilitator read the questions from the ground.

Despite weaknesses the survey exhibited important strengths. The design ensured that youth played a strong role in developing the questionnaire, and implementing the survey. Many of the youth involved have gone on to train as peer educators for their communities, so the survey has played a role in developing youth networks needed for programmatic work.

It is usually difficult to mobilise adequate involvement of young women in sexual health surveys for a range of reasons, and the fact that the survey included 49.2% female participants can be considered a major success.

Another unexpected outcome of the survey was the support of leaders and communities for the process. Engaging with leaders from an early stage was an effective approach and again should contribute towards the meaningful engagement of leaders and adults during the implementation of programmatic work.

## 5. Key Findings

The KAP Survey identified a range of risk factors affecting young people in the Autonomous Region of Bougainville. Key points include the following:

- Significant levels of drug and alcohol usage were reported especially among male youth
- Most youth participating in the survey were already sexually active. Half reported their first sex by the age of 18 and a quarter by the age of 16 years
- Substantial numbers of youth reported sexual partners for paid or transactional sex
- Of those youth reporting unpaid sex partners most (80% of young males) reported more than one sex partner in the last year
- Male to male (MSM) sexual activity was reported by some youth
- High levels of forced sex (rape) was reported among young women and girls
- Overall knowledge, access and usage of male condoms was low (and much lower for female condoms).
- Familiarity to male condoms was low, especially for female youth. Youth perception of social support for condom use by peers/ leaders and adults in the community was also low, again especially as perceived by female youth
- Knowledge about HIV symptoms, prevention and transmission was weak
- Knowledge of sexually transmitted infections (STI) was weak though self-reported STI incidence was significant. Less than a third of youth reported they would seek treatment for an STI at a health clinic
- Knowledge of Prevention of Parent to Child Transmission was low
- Almost a quarter of males, though only half as many females, reported having had Voluntary Counselling and Testing

- The attitudes surveyed suggest that there are high levels of HIV related stigma among youth
- Low levels of perceived support for discussion of sexual issues in the community were reported, especially among female youth
- Analysis suggests condom usage by youth can be increased by better promotion, including demonstration, and by increasing social acceptance of condoms among leaders and adults

## **6. Recommendations:**

Given the findings of the KAP Survey, the following key recommendations are made. These recommendations will provide priorities to CARE PNG's KTA Project in the ARB, but are also directed more widely to leaders and stakeholder partners within the Region:

1. Build leadership at all levels to increase support for improving youth sexual and reproductive health
2. Increase access to quality sexual and reproductive health services for youth, including youth-friendly STI treatment services
3. Build on local approaches to address gender issues including particularly sexual violence
4. Improve knowledge, skills and attitudes of youth around key sexual and reproductive health issues
5. Promote greater access, acceptability and use of condoms among youth who need them
6. Develop programs to address alcohol and drugs use
7. Increase access to appropriate services for vulnerable groups including MSM
8. Work in partnership with People Living with HIV to reduce HIV related stigma and discrimination

## 7. References

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<sup>1</sup> National Department of Health STI, HIV and AIDS Surveillance Unit, October 2010

<sup>2</sup> UNAIDS (2009). 2009 AIDS Epidemic Update. Geneva, UNAIDS

<sup>3</sup> Youth and HIV in the Autonomous Region of Bougainville: Situation Analysis Report. The Autonomous Region of Bougainville AIDS Committee. 2010

<sup>4</sup> ML Plummer, DA Ross, et al. "A bit more truthful": The validity of adolescent sexual behaviour collected in rural northern Tanzania, using five methods. Sexually Transmitted Infections. 2004; 80; 49 – 56.

<sup>5</sup> A Knowledge, Attitude and Practice Survey Conducted Among Youth in the Eastern Highlands and Madang Provinces of Papua New Guinea, Save the Children 2007

<sup>6</sup> Social Mapping Project, Bougainville Province. National HIV and AIDS Support Project, 2004

<sup>7</sup> Youth in Bougainville and the Solomon Islands, A Participatory Needs Assessment, UNICEF 2005

<sup>8</sup> National HIV and AIDS Prevention Strategy 2010 – 2015, PNG National AIDS Council, 2009

<sup>9</sup> Papua New Guinea National HIV and AIDS Strategy 2011 – 2015. PNG National AIDS Council

<sup>10</sup> Key issues acting as barriers to access health services including STI clinics and VCT services by youth in Eastern Highlands Province. Save the Children in Papua New Guinea. 2007